

SWARM by Bruce Sterling

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NOVELETS

SWARM	4	Bruce Sterling
THE BLESSING OF LA LLORONA	33	Don L. Daglow
STATION GEHENNA	92	Andrew Weiner

SHORT STORIES

ONE NIGHT OF SONG	68	Isaac Asimov
VALHALLA	73	Gregory Benford
THE BUNG-HOLE CAPER	79	Thomas A. Easton
THAT FROG	124	Michael Shea
THE ECM WAR	144	Nicholas Yermakov

DEPARTMENTS

BOOKS	25	Algis Budrys
NEPTUNE RISING (verse)	88	Jane Yolen
FILMS: Twilight to Dark	89	Baird Searles
SCIENCE: Change of Time and States	133	Isaac Asimov
F&SF COMPETITION	159	

CARTOONS: NURIT KARLIN (67), ED ARNO (157)

COVER BY CARL LUNDGREN FOR "SWARM"

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This superior story imagines an alien society, a Nest, that is truly strange and different, and it introduces to F&SF readers a young writer who tells us that he is 27, married, works for the state government (in Austin, Texas), listens to a lot of new wave rock and collects carnivorous plants. Mr. Sterling has also written two SF novels, INVOLUTION OCEAN (1977) and THE ARTIFICIAL KID (1980).

Swarm

BY
BRUCE STERLING

I will miss your conversation during the rest of the voyage," the alien said.

Captain-doctor Simon Afriel folded his jeweled hands over his gold-embroidered waistcoat. "I regret it also, ensign," he said in the alien's own hissing language. "Our talks together have been very useful to me. I would have paid to learn so much, but you gave it freely."

"But that was only information," the alien said. He shrouded his bead-bright eyes behind thick nictitating membranes. "We Investors deal in energy, and precious metals. To prize and pursue mere knowledge is an immature racial trait." The alien lifted the long ribbed frill behind his pinhole-sized ears.

"No doubt you are right," Afriel said, despising him. "We humans are as children to other races, however; so a certain immaturity seems natural to

us." Afriel pulled off his sunglasses to rub the bridge of his nose. The starship cabin was drenched in searing blue light, heavily ultraviolet. It was the light the Investors preferred, and they were not about to change it for one human passenger.

"You have not done badly," the alien said magnanimously. "You are the kind of race we like to do business with: young, eager, plastic, ready for a wide variety of goods and experiences. We would have contacted you much earlier, but your technology was still too feeble to afford us a profit."

"Things are different now," Afriel said. "We'll make you rich."

"Indeed," the Investor said. The frill behind his scaly head flickered rapidly, a sign of amusement. "Within two hundred years you will be wealthy enough to buy from us the secret of our star-flight. Or perhaps your Mech-

anist faction will discover the secret through research."

Afriel was annoyed. As a member of the Reshaped faction, he did not appreciate the reference to the rival Mechanists. "Don't put too much stock in mere technical expertise," he said. "Consider the aptitude for languages we Shapers have. It makes our faction a much better trading partner. To a Mechanist, all Investors look alike."

The alien hesitated. Afriel smiled. He had made an appeal to the alien's personal ambition with his last statement, and the hint had been taken. That was where the Mechanists always erred. They tried to treat all Investors equally, using the same programmed routines each time. They lacked imagination.

Something would have to be done about the Mechanists, Afriel thought. Something more permanent than the small but deadly confrontations between isolated ships in the Asteroid Belt and the ice-rich rings of Saturn. Both factions maneuvered constantly, looking for a decisive stroke, bribing away each other's best talent, practicing ambush, assassination, and industrial espionage.

Captain-doctor Simon Afriel was a past master of these pursuits. That was why the Reshaped faction had paid the millions of kilowatts necessary to buy his passage. Afriel held doctorates in biochemistry and alien linguistics, and a master's degree in magnetic weapons

engineering. He was thirty-eight years old and had been Reshaped according to the state of the art at the time of his conception. His hormonal balance had been altered slightly to compensate for long periods spent in free-fall. He had no appendix. The structure of his heart had been redesigned for greater efficiency, and his large intestine had been altered to produce the vitamins normally made by intestinal bacteria. Genetic engineering and rigorous training in childhood had given him an intelligence quotient of one hundred and eighty. He was not the brightest of the agents of the Ring Council, but he was one of the most mentally stable and the best trusted.

"It seems a shame," the alien said, "that a human of your accomplishments should have to rot for two years in this miserable, profitless outpost."

"The years won't be wasted," Afriel said.

"But why have you chosen to study the Swarm? They can teach you nothing, since they cannot speak. They have no wish to trade, having no tools or technology. They are the only spacefaring race to be essentially without intelligence."

"That alone should make them worthy of study."

"Do you seek to imitate them, then? You would make monsters of yourselves." Again the ensign hesitated. "Perhaps you could do it. It would be bad for business, however."

There came a fluting burst of alien

music over the ship's speakers, then a screeching fragment of Investor language. Most of it was too high-pitched for Afriel's ears to follow.

The alien stood, his jeweled skirt brushing the tips of his clawed, bird-like feet. "The Swarm's symbiote has arrived," he said.

"Thank you," Afriel said. When the ensign opened the cabin door, Afriel could smell the Swarm's representative; the creature's warm, yeasty scent had spread rapidly through the starship's recycled air.

Afriel quickly checked his appearance in a pocket mirror. He touched powder to his face and straightened the round velvet hat on his shoulder-length reddish-blond hair. His earlobes glittered with red impact-rubies, thick as his thumbs' ends, mined from the Asteroid Belt. His knee-length coat and waistcoat were of gold brocade; the shirt beneath was of dazzling fineness, woven with red-gold thread. He had dressed to impress the Investors, who expected and appreciated a prosperous look from their customers. How could he impress this new alien? Smell, perhaps. He freshened his perfume.

Beside the starship's secondary airlock, the Swarm's symbiote was chittering rapidly at the ship's commander. The commander was an old and sleepy Investor, twice the size of most of her crewmen. Her massive head was encrusted in a jeweled helmet. From within the helmet her clouded eyes glittered like cameras.

The symbiote lifted on its six posterior legs and gestured feebly with its four clawed forelimbs. The ship's artificial gravity, a third again as strong as Earth's, seemed to bother it. Its rudimentary eyes, dangling on stalks, were shut tight against the glare. It must be used to darkness, Afriel thought.

The commander answered the creature in its own language. Afriel grimaced, for he had hoped that the creature spoke Investor. Now he would have to learn another language, a language designed for a being without a tongue.

After another brief interchange the commander turned to Afriel. "The symbiote is not pleased with your arrival," she told Afriel in the Investor language. "There has apparently been some disturbance here involving humans, in the recent past. However, I have prevailed upon it to admit you to the Nest. The episode has been recorded. Payment for my diplomatic services will be arranged with your faction when I return to your native star system."

"I thank Your Authority," Afriel said. "Please convey to the symbiote my best personal wishes, and the harmlessness and humility of my intentions...." He broke off short as the symbiote lunged toward him, biting him savagely in the calf of his left leg. Afriel jerked free and leapt backward in the heavy artificial gravity, going into a defensive position. The symbiote had ripped away a long shred of his

pants leg; it now crouched quietly, eating it.

"It will convey your scent and composition to its nestmates," said the commander. "This is necessary. Otherwise you would be classed as an invader, and the Swarm's warrior caste would kill you at once."

Afriel relaxed quickly and pressed his hand against the puncture wound to stop the bleeding. He hoped that none of the Investors had noticed his reflexive action. It would not mesh well with his story of being a harmless researcher.

"We will reopen the airlock soon," the commander said phlegmatically, leaning back on her thick reptilian tail. The symbiote continued to munch the shred of cloth. Afriel studied the creature's neckless segmented head. It had a mouth and nostrils; it had bulbous atrophied eyes on stalks; there were hinged slats that might be radio receivers, and two parallel ridges of clumped wriggling antennae, sprouting among three chitinous plates. Their function was unknown to him.

The airlock door opened. A rush of dense, smoky aroma entered the departure cabin. It seemed to bother the half-dozen Investors, who left rapidly. "We will return in six hundred and twelve of your days, as by our agreement," the commander said.

"I thank Your Authority," Afriel said.

"Good luck," the commander said in English. Afriel smiled.

The symbiote, with a sinuous wriggle of its segmented body, crept into the airlock. Afriel followed it. The airlock door shut behind them. The creature said nothing to him but continued munching loudly. The second door opened, and the symbiote sprang through it, into a wide, round, stone tunnel. It vanished at once into the gloom.

Afriel put his sunglasses into a pocket of his jacket and pulled out a pair of infrared goggles. He strapped them to his head and stepped out of the airlock. The artificial gravity vanished, replaced by the almost imperceptible gravity of the Swarm's asteroid nest. Afriel smiled, comfortable for the first time in weeks. Most of his adult life had been spent in free-fall, in the Shaper's colonies in the rings of Saturn.

Squatting in a dark cavity in the side of the tunnel was a disk-headed, furred animal the size of an elephant. It was clearly visible in the infrared of its own body heat. Afriel could hear it breathing. It waited patiently until Afriel had launched himself past it, deeper into the tunnel. Then it took its place in the end of the tunnel, puffing itself up with air until its swollen head securely plugged the end of the corridor. Its multiple legs were firmly planted in sockets in the walls.

The Investor's ship had left. Afriel remained here, inside one of the millions of planetoids that circled the giant star Betelgeuse in a girdling ring

with almost five times the mass of Jupiter. As a source of potential wealth it dwarfed the entire solar system, and it belonged, more or less, to the Swarm. At least, no other race had challenged them for it within the memory of the Investors.

Afriel peered up the corridor. It seemed deserted, and without other bodies to cast infrared heat, he could not see very far. Kicking against the wall, he floated hesitantly down the corridor.

He heard a human voice. "Doctor Afriel!"

"Doctor Mirny!" he called out. "This way!"

He first saw a pair of young symbiotes scuttling towards him, the tips of their clawed feet barely touching the walls. Behind them came a woman wearing goggles like his own. She was young, and attractive in the trim, anonymous way of the genetically reshaped.

She screeched something at the symbiotes in their own language, and they stopped, waiting. She coasted forward, and Afriel caught her arm, expertly stopping their momentum.

"You didn't bring any luggage?" she said anxiously.

He shook his head. "We got your warning before I was sent out. I have only the clothes I'm wearing and a few items in my pockets."

She looked at him critically. "Is that what people are wearing in the Rings these days? Things have changed

more than I thought."

Afriel looked at his brocaded coat and laughed. "It's a matter of policy. The Investors are always readier to talk to a human who looks ready to do business on a large scale. All the Shaper's representatives dress like this these days. We've stolen a jump on the Mechanists; they still dress in those coveralls." He hesitated, not wanting to offend her. Galina Mirny's intelligence was rated at almost two hundred. Men and women that bright were sometimes flighty and unstable, likely to retreat into private fantasy worlds or become enmeshed in strange and impenetrable webs of plotting and rationalization. High intelligence was the strategy the Shapers had chosen in the struggle for cultural dominance, and they were obliged to stick to it, despite its occasional disadvantages. They had tried breeding the super-bright — those with quotients over two hundred — but so many had defected from the Shapers' colonies that the faction had stopped producing them.

"You wonder about my own clothing," Mirny said.

"It certainly has the appeal of novelty," Afriel said with a smile.

"It was woven from the fibers of a pupa's cocoon," she said. "My original wardrobe was eaten by a scavenger symbiote during the troubles last year. I usually go nude, but I didn't want to offend you by too great a show of intimacy."

Afriel shrugged. "I usually go nude

myself in my own environment. If the temperature is constant, then clothes are useless, except for pockets. I have a few tools on my person, but most are of little importance. We're the Reshaped, our tools are here." He tapped his head. "If you can show me a safe place to put my clothes...."

She shook her head. It was impossible to see her eyes for the goggles, which made her expression hard to read. "You've made your first mistake, doctor. There are no places of our own here. It was the same mistake the Mechanist agents made, the same one that almost killed me as well. There is no concept of privacy or property here. This is the Nest. If you seize any part of it for yourself — to store equipment, to sleep in, whatever — then you become an intruder, an enemy. The two Mechanists — a man and a woman — tried to secure an unused chamber for their computer lab. Warriors broke down their door and devoured them. Scavengers ate their equipment, glass, metal, and all."

Afriel smiled coldly. "It must have cost them a fortune to ship all that material here."

Mirny shrugged. "They're wealthier than we are. Their machines, their mining. They meant to kill me, I think. Surreptitiously, so the warriors wouldn't be upset by a show of violence. They had a computer that was learning the language of the springtails faster than I could."

"But you survived," Afriel pointed

out. "And your tapes and reports — especially the early ones, when you still had most of your equipment — were of tremendous interest. The Council is behind you all the way. You've become quite a celebrity in the Rings, during your absence."

"Yes, I expected as much," she said.

Afriel was nonplused. "If I found any deficiency in them," he said carefully, "it was in my own field, alien linguistics." He waved vaguely at the two symbiotes who accompanied her. "I assume you've made great progress in communicating with the symbiotes, since they seem to do all the talking for the Nest."

She looked at him with an unreadable expression and shrugged. "There are at least fifteen different kinds of symbiotes here. Those that accompany me are called the springtails, and they speak only for themselves. They are savages, doctor, who received attention from the Investors only because they can still talk. They were a space-going race at one time, but they've forgotten it. They discovered the Nest and they were absorbed, they became parasites." She tapped one of them on the head. "I tamed these two because I learned to steal and beg food better than they can. They stay with me now and protect me from the larger ones. They are jealous, you know. They have only been with the Nest for perhaps ten thousand years and are still uncertain of their position. They still think, and wonder sometimes. After

ten thousand years there is still a little of that left to them."

"Savages," Afriel said. "I can well believe that. One of them bit me while I was still aboard the starship. He left a lot to be desired as an ambassador."

"Yes, I warned him you were coming," said Mirny. "He didn't much like the idea, but I was able to bribe him with food.... I hope he didn't hurt you badly."

"A scratch," Afriel said. "I assume there's no chance of infection."

"I doubt it very much. Unless you brought your own bacteria with you."

"Hardly likely," Afriel said, offended. "I have no bacteria. And I wouldn't have brought microorganisms to an alien culture anyway."

Mirny looked away. "I thought you might have some of the special genetically altered ones.... I think we can go now. The springtail will have spread your scent by mouth-touching in the subsidiary chamber, ahead of us. It will be spread throughout the Nest in a few hours. Once it reaches the Queen, it will spread very quickly."

Placing her feet against the hard shell of one of the young springtails, she launched herself down the hall. Afriel followed her. The air was warm and he was beginning to sweat under his elaborate clothing, but his antiseptic sweat was odorless.

They exited into a vast chamber dug from the living rock. It was arched and oblong, eighty meters long and about twenty in diameter. It swarmed

with members of the Nest.

There were hundreds of them. Most of them were workers, eight-legged and furred, the size of Great Danes. Here and there were members of the warrior caste, horse-sized furry monsters with heavy fanged heads the size and shape of overstuffed chairs.

A few meters away, two workers were carrying a member of the sensor caste, a being whose immense flattened head was attached to an atrophied body that was mostly lungs. The sensor had eyes and its furred chitin sprouted long coiled antennae that twitched feebly as the workers bore it along. The workers clung to the hollowed rock of the chamber walls with hooked and suckered feet.

A paddle-limbed monster with a hairless, faceless head came sculling past them, through the warm reeking air. The front of its head was a nightmare of sharp grinding jaws and blunt armored acid spouts. "A tunneler," Mirny said. "It can take us deeper into the Nest — come with me." She launched herself toward it and took a handhold on its furry, segmented back. Afriel followed her, joined by the two immature springtails, who clung to the thing's hide with their forelimbs. Afriel shuddered at the warm, greasy feel of its rank, damp fur. It continued to scull through the air, its eight fringed paddle feet catching the air like wings.

"There must be thousands of them," Afriel said.

"I said a hundred thousand in my last report, but that was before I had fully explored the Nest. Even now there are long stretches I haven't seen. They must number close to a quarter of a million. This asteroid is about the size of the Mechanists' biggest base — Ceres. It still has rich veins of carbonaceous material. It's far from mined out."

Afriel closed his eyes. If he were to lose his goggles, he would have to feel his way, blind, through these teeming, twitching, wriggling thousands. "The population's still expanding, then?"

"Definitely," she said. "In fact, the colony will launch a mating swarm soon. There are three dozen male and female alates in the chambers near the Queen. Once they're launched, they'll mate and start new Nests. I'll take you to see them presently." She hesitated. "We're entering one of the fungal gardens now."

One of the young springtails quietly shifted position. Grabbing the tunneler's fur with its forelimbs, it began to gnaw on the cuff of Afriel's pants. Afriel kicked it soundly, and it jerked back, retracting its eyestalks.

When he looked up again, he saw that they had entered a second chamber, much larger than the first. The walls around, overhead and below were buried under an explosive profusion of fungus. The most common types were swollen, barrel-like domes, multi-branched massed thickets, and spaghetti-like tangled extrusions, that

moved very slightly in the faint and odorous breeze. Some of the barrels were surrounded by dim mists of exhaled spores.

"You see those caked-up piles beneath the fungus, its growth medium?" Mirny said.

"Yes."

"I'm not sure whether it is a plant form or just some kind of complex biochemical sludge," she said. "The point is that it grows in sunlight, on the outside of the asteroid. A food source that grows in naked space! Imagine what that would be worth, back in the Rings."

"There aren't words for its value," Afriel said.

"It's inedible by itself," she said. "I tried to eat a very small piece of it once. It was like trying to eat plastic."

"Have you eaten well, generally speaking?"

"Yes. Our biochemistry is quite similar to the Swarm's. The fungus itself is perfectly edible. The regurgitate is more nourishing, though. Internal fermentation in the worker hindgut adds to its nutritional value."

Afriel stared. "You grow used to it," Mirny said. "Later I'll teach you how to solicit food from the workers. It's a simple matter of reflex tapping — it's not controlled by pheromones, like most of their behavior." She brushed a long lock of clumped and dirty hair from the side of her face. "I hope the pheromonal samples I sent back were worth the cost of transportation."

"Oh, yes," said Afriel. "The chemistry of them was fascinating. We managed to synthesize most of the compounds. I was part of the research team myself." He hesitated. How far did he dare trust her? She had not been told about the experiment he and his superiors had planned. As far as Mirny knew, he was a simple, peaceful researcher, like herself. The Shapers' scientific community was suspicious of the minority involved in military work and espionage.

As an investment in the future, the Shapers had sent researchers to each of the nineteen alien races described to them by the Investors. This had cost the Shaper economy many gigawatts of precious energy and tons of rare metals and isotopes. In most cases, only two or three researchers could be sent; in seven cases, only one. For the Swarm, Galina Mirny had been chosen. She had gone peacefully, trusting in her intelligence and her good intentions to keep her alive and sane. Those who had sent her had not known whether her findings would be of any use or importance. They had only known that it was imperative that she be sent, even alone, even ill-equipped, before some other faction sent their own people and possibly discovered some technique or fact of overwhelming importance. And Dr. Mirny had indeed discovered such a situation. It had made her mission into a matter of Ring security. That was why Afriel had come.

"You synthesized the compounds?" she said. "Why?"

Afriel smiled disarmingly. "Just to prove to ourselves that we could do it, perhaps."

She shook her head. "No mind-games, Doctor Afriel, please. I came this far partly to escape from such things. Tell me the truth."

Afriel stared at her, regretting that the goggles meant he could not meet her eyes. "Very well," he said. "You should know, then, that I have been ordered by the Ring Council to carry out an experiment that may endanger both our lives."

Mirny was silent for a moment. "You're from Security, then?"

"My rank is captain."

"I knew it.... I knew it when those two Mechanists arrived. They were so polite, and so suspicious — I think they would have killed me at once if they hadn't hoped to bribe or torture some secret out of me. They scared the life out of me, Captain Afriel.... You scare me, too."

"We live in a frightening world, doctor. It's a matter of faction security."

"Everything's a matter of faction security with you lot," she said. "I shouldn't take you any farther, or show you anything more. This Nest, these creatures — they're not *intelligent*, captain. They can't think, they can't learn. They're innocent, *primordially* innocent. They have no knowledge of good and evil. They have no

knowledge of *anything*. The last thing they need is to become pawns in a power struggle within some other race, light-years away."

The tunneler had turned into an exit from the fungal chambers and was paddling slowly along in the warm darkness. A group of creatures like gray, flattened basketballs floated by from the opposite direction. One of them settled on Afriel's sleeve, clinging with frail, whiplike tentacles. Afriel brushed it gently away, and it broke loose, emitting a stream of foul reddish droplets.

"Naturally I agree with you in principle, doctor," Afriel said smoothly. "But consider these Mechanists. Some of their extreme factions are already more than half machine. Do you expect humanitarian motives from them? They're cold, doctor — cold and soulless creatures who can cut a living man or woman to bits and never feel their pain. Most of the other factions hate us. They think we've set ourselves up as racist supermen because we won't interbreed, because we've chosen the freedom to manipulate our own genes. Would you rather that one of these cults do what we must do, and use the results against us?"

"This is double-talk." She looked away. All around them workers laden down with fungus, their jaws full and guts stuffed with it, were spreading out into the Nest, scuttling alongside them or disappearing into branch tunnels departing in every direction, including

straight up and straight down. Afriel saw a creature much like a worker, but with only six legs, scuttle past in the opposite direction, overhead. It was a parasite mimic. How long, he wondered, did it take a creature to evolve to look like that?

"It's no wonder that we've had so many defectors, back in the Rings," she said sadly. "If humanity is so stupid as to work itself into a corner like you describe, then it's better to have nothing to do with them. Better to live alone. Better not to help the madness spread."

"That kind of talk will only get us all killed," Afriel said. "We owe an allegiance to the faction that produced us."

"Tell me truly, captain," she said. "Haven't you ever felt the urge to leave everything — everyone — all your duties and constraints, and just go somewhere to think it all out? Your whole world, and your part in it? We're trained so hard, from childhood, and so much is demanded from us. Don't you think it's made us lose sight of our goals, somehow?"

"We live in space," Afriel said flatly. "Space is an unnatural environment, and it takes an unnatural effort from unnatural people to prosper there. Our minds are our tools, and philosophy has to come second. Naturally I've felt those urges you mention. They're just another threat to guard against. I believe in an ordered society. Technology has unleashed tremendous

forces that are ripping society apart. Some one faction must arise from the struggle and integrate things. We who are Reshaped have the wisdom and restraint to do it humanely. That's why I do the work I do." He hesitated. "I don't expect to see our day of triumph. I expect to die in some brushfire conflict, or through assassination. It's enough that I can foresee that day."

"But the arrogance of it, captain!" she said suddenly. "The arrogance of your little life and its little sacrifice! Consider the Swarm, if you really want your humane and perfect order. Here it is! Where it's always warm and dark, and it smells good, and food is easy to get, and everything is endlessly and perfectly recycled. The only resources that are ever lost are the bodies of the mating swarms, and a little air from the airlocks when the workers go out to harvest. A Nest like this one could last unchanged for hundreds of thousands of years. Hundreds, of thousands, of years. Who, or what, will remember us and our stupid faction in even a thousand years?"

Afriel shook his head. "That's not a valid comparison. There is no such long view for us. In another thousand years we'll be machines, or gods." He felt the top of his head; his velvet cap was gone. No doubt something was eating it by now.

The tunneler took them even deeper into the honeycombed free-fall maze of the asteroid. They saw the pupal chambers, where pallid larvae twitch-

ed in swaddled silk; the main fungal gardens; the graveyard pits, where winged workers beat ceaselessly at the soupy air, feverishly hot from the heat of decomposition. Corrosive black fungus ate the bodies of the dead into coarse black powder, carried off by blackened workers themselves three-quarters dead.

Later they left the tunneler and floated on by themselves. The woman moved with the ease of long habit; Afriel followed her, colliding bruisingly with squeaking workers. There were thousands of them, clinging to ceiling, walls, and floor, clustering and scurrying at every conceivable angle.

Later still they visited the chamber of the winged princes and princesses, an echoing round vault where creatures forty meters long hung crooked-legged in midair. Their bodies were segmented and metallic, with organic rocket nozzles on their thoraxes, where wings might have been. Folded along their sleek backs were radar antennae on long sweeping booms. They looked more like interplanetary probes under construction than anything biological. Workers fed them ceaselessly. Their bulging spiracled abdomens were full of compressed oxygen.

Mirny begged a large chunk of fungus from a passing worker, deftly tapping its antennae and provoking a reflex action. She handed most of the fungus to the two springtails, which devoured it greedily and looked expectantly for more.

Afriel tucked his legs into a lotus position and began chewing with determination on the leathery fungus. It was tough, but tasted good, like smoked meat — a Terran delicacy he had tasted only once. The smell of smoke meant disaster in a Shaper's colony.

Mirny maintained a stony silence. "Food's no problem," Afriel said cheerfully. "Where do we sleep?"

She shrugged. "Anywhere.... there are unused niches and tunnels here and there. I suppose you'll want to see the Queen's chamber next."

"By all means."

"I'll have to get more fungus. The warriors are on guard there and have to be bribed with food."

She gathered an armful of fungus from another worker in the endless stream, and they exited through another tunnel. Afriel, already totally lost, was further confused in the maze of chambers and tunnels. At last they exited into an immense lightless cavern, bright with infrared heat from the Queen's monstrous body. It was the colony's central factory. The fact that it was made of warm and pulpy flesh did not conceal its essentially industrial nature. Tons of predigested fungal pap went into the slick blind jaws at one end. The rounded billows of soft flesh digested and processed it, squirming, sucking, and undulating, with loud, machinelike churnings and gurglings. Out of the other end came an endless conveyorlike blobbed stream of eggs, each one packed in a thick hormonal

paste of lubrication. The workers avidly licked the eggs clean and bore them off to nurseries. Each egg was the size of a man's torso.

The process went on and on. There was no day or night here in the lightless center of the asteroid. There was no remnant of a diurnal rhythm in the genes of these creatures. The flow of production was as constant and even as the working of an automated mine.

"This is why I'm here," Afriel murmured in awe. "Just look at this, doctor. The Mechanists have computer-run mining machinery that is generations ahead of ours. But here — in the bowels of this nameless little world, is a genetically run technology that feeds itself, maintains itself, runs itself, efficiently, endlessly, mindlessly. It's the perfect organic tool. The faction that could make use of these tireless workers could make itself an industrial titan. And our knowledge of biochemistry is unsurpassed. We Shapers are just the ones to do it."

"How do you propose to do that?" Mirny asked with open skepticism. "You would have to ship a fertilized queen all the way to the solar system. We could scarcely afford that, even if the Investors would let us, which they wouldn't."

"I don't need an entire colony," Afriel said patiently. "I only need the genetic information from one egg. Our laboratories back in the Rings could clone endless numbers of them."

"But the workers are useless with-

out the rest of the colony to give them orders. They need the pheromones to trigger their behavior modes."

"Exactly," Afriel said. "As it so happens, I possess those pheromones in concentrated form. What I must do now is test them. I must prove that I can use them to make the workers do what I choose. Once I've proven it's possible, I'm authorized to smuggle the genetic information necessary back to the Rings. The Investors won't approve. There are, of course, moral questions involved, and they are not genetically advanced. But we can win their approval back with the profits we make. Best of all, we can beat the Mechanists at their own game."

"You've carried the pheromones here?" Mirny said. "Didn't the Investors suspect something when they found them?"

"Now it's you who has made an error," Afriel said calmly. "You assume that they are infallible. You are wrong. A race without curiosity will never explore every possibility, the way we Shapers did." Afriel pulled up his pants cuff and extended his right leg. "Consider this varicose vein along my shin. Circulatory problems of this sort are common among those who spend a lot of time in free-fall. This vein, however, has been blocked artificially, and its walls biochemically treated to reduce osmosis. Within the vein are ten separate colonies of genetically altered bacteria, each one specially to produce a different Swarm pheromone."

He smiled. "The Investors searched me very thoroughly, including x-rays. They insist, naturally, on knowing about everything transported aboard one of their ships. But the vein appears normal to x-rays, and the bacteria are trapped within compartments in the vein. They are undetectable. I have a small medical kit on my person. It includes a syringe. We can use it to extract the pheromones and test them. When the tests are finished — and I feel sure they will be successful, in fact I've staked my career on it — we can empty the vein and all its compartments. The bacteria will die on contact with air. We can refill the vein with the yolk from a developing embryo. The cells may survive during the trip back, but even if they die, they won't rot. They'll never come in contact with bacteria that can decompose them. Back in the Rings, we can learn to activate and suppress different genes to produce the different castes, just as is done in nature. We'll have millions of workers, armies of warriors if need be, perhaps even organic rocketships, grown from altered alates. If this works, who do you think will remember me then, eh? Me and my arrogant little life and little sacrifice?"

She stared at him; even the bulky goggles could not hide her new respect and even fear. "You really mean to do it, then."

"I made the sacrifice of my time and energy. I expect results, doctor."

"But it's kidnapping. You're talking

about breeding a slave race."

Afriel shrugged, with contempt. "You're juggling words, doctor. I'll cause this colony no harm. I may steal some of its workers' labor while they obey my own chemical orders, but that tiny minority won't be missed. I admit to the murder of one egg, but that is no more a crime than a human abortion. Can the theft of one strand of genetic material be called 'kidnapping'? I think not. As for the scandalous idea of a slave race — I reject it out of hand. These creatures are genetic robots. They will no more be slaves than are laser drills or bulldozers. At the very worst, they will be domestic animals."

Mirny considered the issue. It did not take her long. "It's true. It's not as if a common worker will be staring at the stars, pining for its freedom. They're just brainless neuters."

"Exactly, doctor."

"They simply work. Whether they work for us or the Swarm makes no difference to them."

"I see that you've seized on the beauty of the idea."

"And if it worked," Mirny said, "if it worked, our faction would profit astronomically."

Afriel smiled genuinely, unaware of the chilling sarcasm of his expression. "And the personal profit, doctor.... the valuable expertise of the first to exploit the technique." He spoke gently, quietly. "Ever see a nitrogen snowfall on Titan? I think a habitat of one's own there — larger, much larger

than anything possible before.... A genuine city, Galina, a place where a man can scrap the rules and discipline that madden him...."

"Now it's you who are talking defection, captain-doctor."

Afriel was silent for a moment, then smiled with an effort. "Now you've ruined my perfect reverie," he said. "Besides, what I was describing was the well-earned retirement of a wealthy man, not some self-indulgent hermitage.... there's a clear but subtle difference." He hesitated. "In any case, may I conclude that you're with me in this project?"

She laughed and touched his arm. There was something uncanny about the small sound of her laugh, drowned by a great organic rumble from the Queen's monstrous intestines.... "Do you expect me to resist your arguments for two years? Better that I give in now and save us friction."

"Yes."

"After all, you won't do any harm to the colony. They'll never know anything has happened. And if their genetic line is successfully reproduced back home, there'll never be any reason for humanity to bother them again."

"True enough," said Afriel, though in the back of his mind he instantly thought of the fabulous wealth of Betelgeuse's asteroid system. A day would come, inevitably, when humanity would move to the stars en masse, in earnest. It would be well to know

the ins and outs of every race that might become a rival.

"I'll help you as best I can," she said. There was a moment's silence. "Have you seen enough of this area?"

"Yes." They left the Queen's chamber.

"I didn't think I'd like you at first," she said candidly. "I think I like you better now. You seem to have a sense of humor that most Security people lack."

"It's not a sense of humor," Afriel said sadly. "It's a sense of irony disguised as one."

There were no days in the unending stream of hours that followed. There were only ragged periods of sleep, apart at first, later together, as they held each other in free-fall. The sexual feel of skin and body became an anchor to their common humanity, a divided, frayed humanity so many light-years away that the concept no longer had any meaning to them. Life in the warm and swarming tunnels was the here and now; the two of them were like germs in a bloodstream, moving ceaselessly with the pulsing ebb and flow. They tested the pheromones, one by one, as the hours stretched into months and time grew meaningless.

The pheromonal workings were complex, but not impossibly difficult. The first of the ten pheromones was a simple grouping stimulus, causing large numbers of workers to gather as the pheromone was spread from palp to palp. The workers then waited for

further instructions; if none were forthcoming, they dispersed. To work effectively, the pheromones had to be given in a mix, or series, like computer commands; number one, grouping, for instance, together with the third pheromone, a transferral order, which caused the workers to empty any given chamber and move its effects to another. The ninth pheromone had the best industrial possibilities; it was a building order, causing the workers to gather tunnelers and dredgers and set them to work. Others were annoying; the tenth pheromone provoked grooming behavior, and the workers' furry palps stripped off the remaining rags of Afriel's clothing. The eighth pheromone sent the workers off to harvest material on the asteroid's surface, and in their eagerness to observe its effects the two explorers were almost trapped and swept off into space.

The two of them no longer feared the warrior caste. They knew that a dose of the sixth pheromone would send them scurrying off to defend the eggs, just as it sent the workers to tend them. Mirny and Afriel took advantage of this and secured their own chambers, dug by chemically hijacked workers and defended by a hijacked airlock guardian. They had their own fungal gardens to refresh the air, stocked with the fungus they liked best, and digested by a worker they kept drugged for their own food use. From constant stuffing and lack of exercise the worker had swollen up into its replete

form and hung from one wall like a monstrous grape.

Afriel was tired. He had been without sleep recently for a long time; how long, he didn't know. His body rhythms had not adjusted as well as Mirny's, and he was prone to fits of depression and irritability that he had to repress with an effort. "The Investors will be back sometime," he said. "Sometime soon."

Mirny shrugged. "The Investors," she said, and followed the remark with something in the language of the springtails, that he didn't catch. Despite his linguistic training, Afriel had never caught up with her in her use of the springtails' grating jargon. His training was almost a liability; the springtail language had decayed so much that it was a pidgin tongue, without rules or regularity. He knew enough to give them simple orders, and with his partial control of the warriors he had the power to back it up. The springtails were afraid of him, and the two juveniles that Mirny had tamed had grown into fat, overgrown tyrants that freely terrorized their elders. Afriel had been too busy to seriously study the springtails or the other symbiotes. There were too many practical matters at hand.

"If they come too soon, I won't be able to finish my latest study," she said in English.

Afriel pulled off his infrared goggles and knotted them tightly around his neck. "There's a limit, Galina," he

said, yawning. "You can only memorize so much data without equipment. We'll just have to wait quietly until we can get back. I hope the Investors aren't shocked when they see me. I lost a fortune with those clothes."

"It's been so dull since the mating swarm was launched. And we've had to stop the experiments to let your vein heal. If it weren't for the new growth in the alates' chamber, I'd be bored to death." She pushed greasy hair from her face with both hands. "Are you going to sleep?"

"Yes, if I can."

"You won't come with me? I keep telling you that this new growth is important. I think it's a new caste. It's definitely not an alate. It has eyes like an alate, but it's clinging to the wall."

"It's probably not a Swarm member at all, then," he said tiredly, humoring her. "It's probably a parasite, an alate mimic. Go on and see it, if you want to. I'll be here waiting for you."

He heard her leave. Without his infrareds on, the darkness was still not quite total; there was a very faint luminosity from the steaming, growing fungus in the chamber beyond. The stuffed worker replete moved slightly on the wall, rustling and gurgling. He fell asleep.

When he awoke, Mirny had not yet returned. He was not alarmed. First, he visited the original airlock tunnel, where the Investors had first left him. It was irrational — the Investors always fulfilled their contracts — but he feared

that they would arrive someday, become impatient, and leave without him. The Investors would have to wait, of course. Mirny could keep them occupied in the short time it would take him to hurry to the nursery and rob a developing egg of its living cells. It was best that the egg be as fresh as possible.

Later he ate. He was munching fungus in one of the anterior chambers when Mirny's two tamed springtails found him. "What do you want?" he asked in their language.

"Food-giver no good," the larger one screeched, waving its forelegs in brainless agitation. "Not work, not sleep."

"Not move," the second one said. It added hopefully, "Eat it now?"

Afriel gave them some of his food. They ate it, seemingly more out of habit than real appetite, which alarmed him. "Take me to her," he told them.

The two springtails scurried off; he followed them easily, adroitly dodging and weaving through the crowds of workers. They led him several miles through the network, to the alates' chamber. There they stopped, confused. "Gone," the large one said.

The chamber was empty. Afriel had never seen it empty before, and it was very unusual for the Swarm to waste so much space. He felt dread. "Follow the food-giver," he said. "Follow smell."

The springtails snuffled without

much enthusiasm along one wall; they knew he had no food and were reluctant to do anything without an immediate reward. At last one of them picked up the scent, or pretended to, and followed it up across the ceiling and into the mouth of a tunnel.

It was hard for Afriel to see much in the abandoned chamber; there was not enough infrared heat. He leapt upward after the springtail.

He heard the roar of a warrior and the springtail's choked-off screech. It came flying from the tunnel's mouth, a spray of clotted fluid bursting from its ruptured head. It tumbled end over end until it hit the far wall with a flaccid crunch. It was already dead.

The second springtail fled at once, screeching with grief and terror. Afriel landed on the lip of the tunnel, sinking into a crouch as his legs soaked up momentum. He could smell the acrid stench of the warrior's anger, a pheromone so thick that even a human could scent it. Dozens of other warriors would group here within minutes, or seconds. Behind the enraged warrior he could hear workers and tunnelers shifting and cementing rock.

He might be able to control one enraged warrior, but never two, or twenty. He launched himself from the chamber wall and out an exit.

He searched for the other springtail — he felt sure he could recognize it, it was so much bigger than the others — but he could not find it. With its keen sense of smell, it could easily hide

from him if it wanted to.

Mirny did not return. Uncountable hours passed. He slept again. He returned to the alates' chambers; there were warriors on guard there, warriors that were not interested in food and opened their immense serrated fangs when he approached. They looked ready to rip him apart; the faint reek of aggressive pheromones hung about the place like a fog. He did not see any symbiotes of any kind on the warriors' bodies. There was one species, a thing like a huge tick, that clung only to warriors, but even the ticks were gone.

He returned to his chambers to wait and think. Mirny's body was not in the garbage pits. Of course, it was possible that something else might have eaten her. Should he extract the remaining pheromone from the spaces in his vein and try to break into the alates' chamber? He suspected that Mirny, or whatever was left of her, was somewhere in the tunnel where the springtail had been killed. He had never explored that tunnel himself. There were thousands of tunnels he had never explored.

He felt paralyzed by indecision and fear. If he were quiet, if he did nothing, the Investors might arrive at any moment. He could tell the Ring Council anything he wanted about Mirny's death; if he had the genetics with him, no one would quibble. He did not love her; he respected her, but not enough to give up his life, or his faction's investment. He had not thought of the Ring Council in a long time, and the

thought sobered him. He would have to explain his decision....

He was still in a brown study when he heard a whoosh of air as his living airlock deflated itself. Three warriors had come for him. There was no reek of anger about them. They moved slowly and carefully. He knew better than to try to resist. One of them seized him gently in its massive jaws and carried him off.

It took him to the alates' chamber and into the guarded tunnel. A new, large chamber had been excavated at the end of the tunnel. It was filled almost to bursting by a black-splattered white mass of flesh. In the center of the soft speckled mass were a mouth and two damp, shining eyes; on stalks. Long tendrils like conduits dangled, writhing, from a clumped ridge above the eyes. The tendrils ended in pink, fleshy plug-like clumps.

One of the tendrils had been thrust through Mirny's skull. Her body hung in midair, limp as wax. Her eyes were open, but blind.

Another tendril was plugged into the braincase of a mutated worker. The worker still had the pallid tinge of a larva; it was shrunk and deformed, and its mouth had the wrinkled look of a human mouth. There was a blob like a tongue in the mouth, and white ridges like human teeth. It had no eyes.

It spoke with Mirny's voice. "Captain-doctor Afriel...."

"Galina...."

"I have no such name. You may ad-

dress me as Swarm."

Afriel vomited. The central mass was an immense head. Its brain almost filled the room.

It waited politely until Afriel had finished.

"I find myself awakened again," Swarm said dreamily. "I am pleased to see that it is no major emergency that concerns me. Instead it is a threat that has become almost routine." It hesitated delicately. Mirny's body moved slightly in midair; her breathing was inhumanly regular. The eyes opened and closed. "Another young race."

"What are you?"

"I am the Swarm. That is, I am one of its castes. I am a tool, an adaptation; my specialty is intelligence. I am not often needed. It is good to be needed again."

"Have you been here all along? Why didn't you greet us? We'd have dealt with you. We meant no harm."

The wet mouth on the end of the plug made laughing sounds. "Like yourself, I enjoy irony," it said. "It is a pretty trap you have found yourself in, captain-doctor. You meant to make the Swarm work for you and your race. You meant to breed us and study us and use us. It is an excellent plan, but one we hit upon long before your race evolved."

Stung by panic, Afriel's mind raced frantically. "You're an intelligent being," he said. "There's no reason to do us any harm. Let us talk together. We can help you."

"Yes," Swarm agreed. "You will be helpful. Your companion's memories tell me that this is one of those uncomfortable periods when galactic intelligence is rife. Intelligence is a great bother. It makes all kinds of trouble for us."

"What do you mean?"

"You are a young race and lay great stock by your own cleverness," Swarm said. "As usual, you fail to see that intelligence is not a survival trait."

Afriel wiped sweat from his face. "We've done well," he said. "We came to you, and peacefully. You didn't come to us."

"I refer to exactly that," Swarm said urbanely. "This urge to expand, to explore, to develop, is just what will make you extinct. You naively suppose that you can continue to feed your curiosity indefinitely. It is an old story, pursued by countless races before you. Within a thousand years — perhaps a little longer — your species will vanish."

"You intend to destroy us, then? I warn you it will not be an easy task —"

"Again you miss the point. Knowledge is power! Do you suppose that fragile little form of yours — your primitive legs, your ludicrous arms and hands, your tiny, scarcely wrinkled brain — can contain all that power? Certainly not! Already your race is flying to pieces under the impact of your own expertise. The original human form is becoming obsolete. Your own genes have been altered, and you, cap-

tain-doctor, are a crude experiment. In a hundred years you will be a Neanderthal. In a thousand years you will not even be a memory. Your race will go the same way as a thousand others."

"And what way is that?"

"I do not know." The thing on the end of the Swarm's arm made a chuckling sound. "They have passed beyond my ken. They have all discovered something, learned something, that has caused them to transcend my understanding. It may be that they even transcend *being*. At any rate, I cannot sense their presence anywhere. They seem to do nothing, they seem to interfere in nothing; for all intents and purposes, they seem to be dead. Vanished. They may have become gods, or ghosts. In either case, I have no wish to join them."

"So then — so then you have —"

"Intelligence is very much a two-edged sword, captain-doctor. It is useful only up to a point. It interferes with the business of living. Life, and intelligence, do not mix very well. They are not at all closely related, as you childishly assume."

"But you, then — you are a rational being —"

"I am a tool, as I said." The mutated device on the end of its arm made a sighing noise. "When you began your pheromonal experiments, the chemical imbalance became apparent to the Queen. It triggered certain genetic patterns within her body, and I was reborn. Chemical sabotage is a problem

that can best be dealt with by intelligence. I am a brain replete, you see, specially designed to be far more intelligent than any young race. Within three days I was fully self-conscious. Within five days I had deciphered these markings on my body. They are the genetically encoded history of my race ... within five days and two hours I recognized the problem at hand and knew what to do. I am now doing it. I am six days old.

"What is it you intend to do?"

"Your race is a very vigorous one. I expect it to be here, competing with us, within five hundred years. Perhaps much sooner. It will be necessary to make a thorough study of such a rival. I invite you to join our community on a permanent basis."

"What do you mean?"

"I invite you to become a symbiote. I have here a male and a female, whose genes are altered and therefore without defects. You make a perfect breeding pair. It will save me a great deal of trouble with cloning."

"You think I'll betray my race and deliver a slave species into your hands?"

"Your choice is simple, captain-doctor. Remain an intelligent, living being, or become a mindless puppet, like your partner. I have taken over all the functions of her nervous system; I can do the same to you."

"I can kill myself."

"That might be troublesome, because it would make me resort to de-

veloping a cloning technology. Technology, though I am capable of it, is painful to me. I am a genetic artifact; there are fail-safes within me that prevent me from taking over the Nest for my own uses. That would mean falling into the same trap of progress as other intelligent races. For similar reasons, my lifespan is limited. I will live for only a thousand years, until your race's brief flurry of energy is over and peace resumes once more."

"Only a thousand years?" Afriel laughed bitterly. "What then? You kill off my descendants, I assume, having no further use for them."

"No. We have not killed any of the fifteen other races we have taken for defensive study. It has not been necessary. Consider that small scavenger floating by your head, captain-doctor, that is feeding on your vomit. Five hundred million years ago its ancestors made the galaxy tremble. When they attacked us, we unleashed their own kind upon them. Of course, we altered our side, so that they were smarter, tougher, and, of course, totally loyal to us. Our Nests were the only world they knew, and they fought with a valor and inventiveness we never could have matched.... Should your race arrive to exploit us, we will naturally do the same."

"We humans are different."

"Of course."

"A thousand years here won't change us. You will die and our descendants will take over this Nest. We'll be running things, despite you, in a few generations. The darkness won't make any difference."

"Of course not. You don't need eyes here. You don't need anything."

"You'll allow me to stay alive? To teach them anything I want?"

"Certainly, captain-doctor. We are doing you a favor, in all truth. In a thousand years your descendants here will be the only remnants of the human race. We are generous with our immortality; we will take it upon ourselves to preserve you."

"You're wrong, Swarm. You're wrong about intelligence, and you're wrong about everything else. Maybe other races would crumble into parasitism, but we humans are different."

"Certainly. You'll do it, then?"

"Yes. I accept your challenge. And I will defeat you."

"Splendid. When the Investors return here, the springtails will say that they have killed you, and will tell them to never return. They will not return. The humans should be the next to arrive."

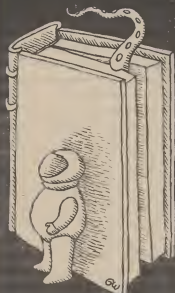
"If I don't defeat you, they will."

"Perhaps." Again it sighed. "I'm glad I don't have to absorb you. I would have missed your conversation."



Books

ALGIS
BUDRYS



Drawing by Gahan Wilson

The Sword of the Lictor, Gene Wolfe.
Timescape Books, \$13.95

Facsimile of the April 1965 issue, The Magazine of Fantasy and Science Fiction,
Southern Illinois University Press, \$16.95

Fantasy is something I write less about than I do science fiction. This is not for lack of love for it, but rather because I think there is less good fantasy around. And because I think the distinction created by having hard-edged labels for these two branches of speculative fiction has often created such confusion that it's hardly possible to speak — especially of "fantasy" — without first conducting a discussion in semantics. We will now have a brief discussion in semantics.

All fiction fantasizes suppositional situations. Speculative fiction is distinguished from all other fictions in that it fantasizes the background; the social setting, if you will, whereas such other fictions as, for instance, "mundane" fictions, assume a real background against which suppositional characters move. "Science fiction" is one of the names for the sort of fiction in which the underlying social assumption is that science is real and technology is the only means of affecting the Universe. "Fantasy" is one of the names for the sort of fiction in which the underlying assumption is that magic is real and its manipulation is the only means of affecting the Universe.

Oh, yeah? What about stories in which spaceships carry the hero to a

planet of vampires? What about Brian Aldiss's *Hothouse* series, in which the Earth and Moon are connected by a web and Sir Isaac Newton can be heard bellowing in his cerements?

I have spoken elsewhere of the stultifying weight thrown on us by the marketing practices of past generations, which attempted to parse out speculative fiction into tidy little categories and have resulted in inextricable concatenations.* The immediate point is that writers *will* speculate, and if their stories thrash a limb or two over some publisher's tidy little fence and sprawl into the "next" "category," tough tiddy. But then we descriptors of the milieu have to invent categories like "science adventure" and "science fantasy" and "heroic fantasy," possibly — nay, certainly — because we readers have been taught that things come in little boxes. When something breaks through into the next box, we call the combined wreckage one new box.

A number of bad writers have noticed this. (A "bad" writer, for the limited purposes of today's meeting, is one who rarely lets hard thought or hard work stand in the way of production.) "Fantasy" appeals to such writers because while "science fiction" can demand some learning in science, "fantasy" can be written with no more dependence on research than is required to recall the folk- and fairy-tales that freefloat in every human culture.

*God, I love the language!

Furthermore, since magic by its very nature is a poorly defined body of knowledge, always open to claims that the rules vary from locality to locality and mood to mood, any assertion of "fact" about magic is not subject to the same sort of true factuality as are assertions about the scientific picture of the Universe. Translation: Slop fantasy is easier to write. Observation: Most contemporary "fantasy" is slop fantasy, and the longer it is, the likelier it is to be slop fantasy.

I have given up reading most "fantasy" epics; the horses in them are disguised cars and the women are inflatable; everybody speaks a mixture of Arthurian and Elizabethan, and the authors have never seen a wilderness except from inside a shell of ripstop Nylon, those who have seen one at all. Quick — ask any one of them to tell you the difference between a necromancer and thaumaturgist. A castle and a keep. A baron and an earl. Still too hard? A mangonel and a ballista? Dzeus Piter save it, most of them even think Gene Wolfe *invents* his terms!

Gene Wolfe. Gene Wolfe writes speculative fiction. Technically, his *Book of The New Sun* tetralogy is science fiction, since all of the "fantasy" elements in it are located in a Terrestrial culture a million years hence, and are explicable as advanced science under Clarke's Dictum.*

"A sufficiently advanced science is indistinguishable from magic," or words to that effect from Arthur C. Clarke, who may be right if we slop what we mean by "distinguishable."

Furthermore, Pocket/Timescape's press release on *The Sword of the Lictor* claims firmly that the tetralogy is science fiction and goes into an incoherent synopsis to prove it. But I wonder. I wonder if anybody would regard this book in any different way if it were set on some planet entirely unconnected to our Earth, and if the "magic" were magic *per se*.

No immediate matter. No *immediate* matter. The fact is that every would-be writer of fantasy epics ought to read this book, the two preceding volumes, and the fourth volume when it comes out some months hence.* The effect may be to drive many of them right into some other field where elegance has not yet set standards; so much the better.

But matters catch up with us. For one thing, *The Shadow of the Torturer* has won the "Howard" Award of the International Fantasy Convention as the best novel of 1980, so my point, and Clarke's, are even further underscored while, for Timescape's blurb writers, here is a dilemma they will, of course, ignore. One thing over-rides marketing categories: a marketable gimmick, which is how they will regard it without reference to the sincere compliment intended by the convention or the gratification due an author who has earned it.

For another matter, I spoke of "this book" meaning *The Book of The New Sun*, which will surely stand as one of the most ambitious, most thoroughgo-

ingly created, most highly individualized works of speculative fiction in the twentieth century. (Whether it will be one of the "best," or widely known outside our community, are matters which are still partially in the hands of the author and in the laps of the gods as well.) These qualities will continue to be evident no matter how the work is categorized, and, at this point, no matter how it ends.*

These are all qualities, however, which stem from the author's energy, ingenuity and talent; the bent of mind that leads a man to put in a full work-week at a job (with whatever satisfactions and felicities it entails), and then, in the daily hours of early morning and late night, pursue the creation of a masterpiece where almost all his peers in a similar situation are content with yardgoods. Pretty good yardgoods, in some cases, with hundreds of thousands of satisfied readers. But things written to please, with a nice balance between the ideal and the attainable-under-the-circumstances. What Wolfe is doing for the community of writers, as distinguished from the community of readers, is to set a standard before which, as noted, even many full-time sorcerers' apprentices must quail. But what of *The Sword of The Lictor*, specifically?

**My money says it will end very well; that is, the wordage of the concluding fourth will so deftly interdepend with the preceding wordage that the reader will perceive a major work of craft and art.*

**The Shadow of the Torturer, The Claw of the Conciliator, The Sword of the Lictor, and, ultimately The Citadel of the Autarch.*

For one thing, it enormously expands the landscape of its world. Severian the torturer in this volume undertakes an epic flight, away from a wrathful potentate and also from his own conception of himself. The sheer physical vistas this journey reveals are eye-popping. As he has done before, Wolfe casually adds post-factum revelations that stop you cold. You knew, for instance, that his world had mountains; they have been mentioned many times. In *Sword* we are shown, in this purposefully offhand manner, that they have all at some time been carved into the busts of now-forgotten monarchs. Hey, presto! the entire panorama stored in our minds has been transmogrified, and yet we don't for an instant feel that this is an instance of an author covering up an earlier lapse with an afterthought. No, the mountains have been that way all along, as Dorcas has been what she was, all along.

But having given away that much of what is in this segment of Severian's growth from callow apprentice toward a stature we can only guess at, I am loath to push farther. So I have to speak elliptically about some of the things that happen here, or I will have given you details you won't thank me for. However, what is happening in this book is that a number of previously tenuous things are being visibly concretized.

Let me put it this way — in this book Wolfe actually begins to translate

some of his terms. There is an Appendix in which we are told what a claviger does, and what "claviger" means. This is very much like the sort of thing Edgar Rice Burroughs appended to his works — a glossary of the language of the Lion Men, a note on the political structure of Barsoom. The difference is that in Wolfe one could go to real reference books at any time and translate much of this for one's self, and deduce the rest. I'm not sure the distinction is without a difference. In the case of Wolfe's marvelous use of obsolete but apt language, I am sure I would have preferred to continue the ongoing game — Wolfe teasing me into philological cryptography, and I resolutely searching the dimmer reaches of my mind-library, eschewing an actual trip to Fowler in the same spirit one brings to doing the *Times* puzzle in ink.

Very well, that's my personal crochet and in any case a minor one. But there are increasing references here to purely science-fictional appurtenances. There are getting to be machines in this story, and although they are marvelous in many ways, they are not as marvelous as uninformed imagination was making them. At the same time, many long threads are being cut; characters are dropping out whom one expected to continue enjoying. The first thing one thinks of is that this is a transitional chapter in Severian's story, and then one wonders if it might not be a little too compressed.

Well, of course it's a transitional volume; the final book is steering toward the author, and he knows it carries a heavy freight. As for all this cutting and tying, we want to remember what he did with the mountains — and before that with the Chatelaine Thecla, and any number of other characters and features whom he had only apparently foreclosed forever. A lot of what seems final here may be going off as part of an orchestrated pyrotechnic display in *Citadel*. But I'm a little put off by the presence of that Appendix and what it seems to stand for; superfluous rationalization.

One thing is sure; it would be difficult for the same convention to give this book a Howard. A Hugo, from another convention, perhaps. The tetralogy as a (projected) whole is still full of the literary magic that superb fantasy conveys. But — although it might not have been possible for Wolfe to avoid this effect — *Sword* considered by itself is science fiction by more than labeling.

I began by hinting broadly that this ought not to make any difference to a reader of speculative fiction. Yet, somehow, it does, a little. Wolfe's premise has always been science-fictional, and the total work will prove science-fictional, and in general effect infused with a species of delicate yet indurate beauty that occurs in science fiction when the premise is great enough and the execution is both subtle and logical — elegant. Yet I find

myself, with only a glimmering of the direction in which answers might lie, wondering if perhaps it will be loss of an element present only in the best fantasy that will to some extent sap this work of science fiction.

And I confess to you that I suddenly know less about these matters than I thought I did. I find myself waiting for Wolfe to teach us, if he does.

You are, of course, reading *The Magazine of Fantasy & Science Fiction*, a journal which has from its beginnings refused to fall in with the idea that a piece of reading must be some one thing or another.

To some extent, this is because Anthony Boucher, one of the founding editors and certainly the prime instigator, held to the idea that science fiction is a branch of fantasy, and therefore the two are essentially the same thing. I didn't know him very well, and so can't say for certain, but I think this is how he accounted for the fact that he and so many other writers of his generation had been able to work fluently for both *Astounding Science Fiction* and *Unknown*. It may have been a sufficient explanation for his liking for this upstart "new" form in the genre magazines, when in truth he was heavily suspicious of technology and, I think, regarded science as being largely concerned with disproving the truths of yesterday's science, ergo busily proving it was almost certainly wrong again.

I don't know that he ever considered the proposition that fantasy and science fiction are coeval branches of speculative fiction, and that — marketing labels aside — the thing that determines the acceptance of a speculative story is not the wizardry or the science but the quality of the speculation.* But if you look at it that way, then of course the Hothouse series belongs in F&SF even though it doesn't fit in either of the two putative boxes.

Bob Mills was the editor when that happened, although it could just as readily have been Boucher. Editors, thank God, have instincts, and good editors know that instinct is a hell of a lot more reliable than any scholarly theory or the publisher's and distributor's neat strategies.

For whatever organic reason, F&SF has prospered and endured for over thirty years, through changes of editor and seeming changes of publisher, through good times in the market and parlous ones, and is still winning Hugos for Best Magazine from the World Science Fiction Convention, a thing it has done with some regularity no matter who the editor was. Of course, for half its life its editor has been Edward Ferman, who literally

"To set aside all doubt, the latter view is mine. I say speculation is a primary survival mechanism, that constraining it intelligently within literary bounds lends a rigor approaching "reality," and that this thesis explains more than any of the others do. But then, that's me.

grew up into the job, taking over from Avram Davidson, Mills's successor.

The first issue on which his name appeared as Editor was the April, 1965. That issue is now available in hard covers, in photoengraved facsimile, with added introductory material and brief memoirs from the contributors, and you should get it on its merits as an issue, as well as for its scholarly value.

(If your bookstore doesn't stock it and you'd rather get it direct, send a check plus a dollar for shipping, and your address, to Southern Illinois University Press, PO Box 3697, Carbondale, IL 62901.)

It's not my intention to snow you with sales talk. \$16.95 is a bite, and copies of the magazine are available from second-hand dealers at less than that. You do miss out on the new added material, some of which is valuable, and you don't get the permanent binding or the non-friable paper. And as some of us know, the SF series the SIU Press has put together with the excellent advice of Martin Harry Greenberg is a must, as a series, for any serious library. As an impulse buy just because Budrys said so, I'd count ten before sealing the envelope.

But what you get if you go for it are some very good stories, leading off with Poul Anderson's "Arsenal Port," (one-third of *The Star Fox*), a column and a story from Isaac Asimov, F&SF's first Gahan Wilson cartoon — you can thank Ed for that shining idea — a

book review column from Judith Merril which makes me squirm with envy at the amount of work that must have gone into it and the range of its interests, another and somewhat differently oriented science column, from Theodore L. Thomas, a good verse from Gerald Jonas, and then a row of various sorts of story from a bunch of people you probably never heard of: Robert Rohrer, TP Caravan, Roderic C. Hodgins, Jane Beauclerk, and Len Guttridge. Or, let me put it this way — TP Caravan was a fairly steady contributor to Chicago-based pulp magazines in the later 1950s, but was later found supervising a crew of caption writers at a New Jersey catalog merchandising house — these are people whom I remember only because I read this issue when it first came out.

The memoirs reveal the reasons. Rohrer was fresh out of high school, with a good track record at *Amazing* and *Fantastic* when this was not the world's outstanding literary trick;

Hodgins wrote only the one story; Beauclerk, a less obvious pseudonym than Caravan, wrote only this one ("Lord Moon") and a predecessor ("We Serve the Star of Freedom," also in F&SF); Guttridge, too, was essentially someone who wandered into these pages along one of the many tracks that create brief intersections with SF magazine publication but do not lead to prominent careers in the field.

In other words, this is not the table of contents one would put into an anthology. What it is is an issue* of a magazine. And the thing about that is that it's a good issue. Guttridge's story is a fey Welsh tale about a librarian who turns into a racing mare, "Lord Moon" is very much like one of the "folk tales" Gene Wolfe has been inserting in the Book of The New Sun, the Caravan is a time-travel gimmick story, and the Rohrer is a social commentary frankly cast in the SF-allegor-

**God, I love the orthography! As well as the syntactical anfractuositities.*

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ical mode, to balance the hard-edge SF-adventure of the Anderson and the Modern Science Fiction (ie., ASF-like) mode of the Asimov short.**

Not all of them are great stories; in fact, none of them are *great* stories, although a more than sufficient quantity are memorable for one excellence or another. But taken together, they form a reading experience representing a rounded, satisfying whole, well worth incalculably more than the asking price on the cover, and I will be damned if I uprated or downrated any of the stories on the basis of its "category." It would be essentially ridiculous for a reader to categorize them, although I did a few sentences ago because I had

***Your memoir to the contrary, Isaac, I wasn't the fiction editor of Playboy when you wrote this. Would that I had been. It was my melancholy task, while running Playboy Press in the direction of quick*

to "describe" them. And I didn't truly describe them, because you can't describe a story, good, bad, or indifferent.

If a story were describable in anything less than its own length and wordage, it would be that description. Follow me? A story is like a prime number, divisible only by itself. And that's what I know about fantasy and science fiction.

money, to occasionally be asked my opinion on a piece of SF or on a science article. When the opinion was positive, it was usually ignored. My own story written around the same illustration eventually appeared in Galaxy, as "Now Hear the Word of the Lord." They ran three other stories by three other guys. It must have seemed a good idea at the time, but then, Playboy the magazine always has so many ideas. And, by the way, you can call me A.J. at parties — and I treasure the moments when you have — but the byline is Algis Budrys.

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Don Daglow is a young writer who was born in San Francisco and now lives in southern California with his wife and son. He wrote one of the original Star Trek computer games and now programs computer games for Mattel Electronics. His first F&SF story concerns a young graduate student in anthropology who sets out to investigate a Mexican ghost story, and it is a fascinating tale indeed.

The Blessing of La Llorona

BY

DON L. DAGLOW

D

ear Dr. Josephson:

Attached is my thesis on La Llorona.

I almost didn't finish it but I figured I owed it to you since you put in so much time with me setting up the original design.

This isn't anything like the idea we developed because the whole thing got so out of control; because I didn't know when to stop sticking my nose in other people's cultures, in things I thought with all my wonderful training I understood. Things I didn't really understand at all.

But I've written down how it happened, with my thoughts and feelings intact, as a primary source for anyone who thinks that anthropology is a noble study and that detached observers can illuminate the life of man.

I will not be continuing in the program after this semester. Thanks for

your help along the way. I appreciate it.

You don't have to return this.

Steve Sorteaux

The original objective of this thesis was to compare the telling of the ghost story, "La Llorona" (pronounced yor-o-na, "The Crying Woman") in three different environments: the major cities of northern Mexico, rural villages of the same region, and the barrios of the Southwestern United States. While still in its very first stages, however, my work became diverted by circumstances which will be described fully below, and therefore the focus of this paper is the La Llorona myth in one barrio (Mexican neighborhood) of Southern California.

My first source on the story's function in the culture of such communities

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was a friend who worked as a bilingual teacher in a local school, Lisa Lopez. We had attended classes together while working on our B.A.'s and had kept up a casual friendship for the two years since graduation. When I phoned her and described my project, she reminded me that the pursuit of a master's in anthropology was "an excuse to hide from the real world behind ivy-covered walls," but she was more than willing to allow me to come in one Monday to discuss with her 12- and 13-year-olds their versions of the story.

The April morning on which I set out was a warm, clear one, the kind of Southern California day where you can't turn on the car radio without hearing some excited announcer crying out, "It looks like summer's finally here!" with all the relief of one who is frightened of the other seasons and now feels at home again on his vernal doorstep. The first smog-alert of the year hadn't come yet, and for once the outline of the steel-jawed mountains was clear cut and visible, 10,000 feet of protective parents guarding the alluvial flood plain they had created.

I turned off the freeway at Archibald Avenue, my old red Pontiac vibrating like a paint-mixing machine, and two miles north I was confronted by my first ghost.

It was about a hundred feet long, dull yellow, its walls covered with spiderwebs of overlapping graffiti. The railroad tracks still ran past the high

platform, ready at any moment to provide a stopping point for the daily run from Los Angeles to the East, a train that never even slowed for this tiny station. Set across the front in big art-deco letters was the name: C U C A - M O N G A.

After spending six years in Southern California I had been aware that the place existed, that it was something more than a myth conjured up whenever an obscure location was desired. Irrigated into vineyards from its desert roots almost a century ago, it sits astride a freeway miles east of Los Angeles. Now it was seeing the vineyards replaced by subdivisions just as they had replaced the desert chaparral. There was an irony there somewhere.

The station floated past the car windows in an instant and was gone.

Five minutes later, I parked beside the architect's nightmare that was the junior high school where Lisa taught. Surrounded by tiny wood-frame houses, it was an ultramodern concrete building, a collection of intersecting angles defining its interior space, with walls seeming to go off in all directions. It looked like Salvador Dali's version of the Maginot Line.

I found the front door only with some difficulty, but the secretary was expecting me and I was quickly escorted to Lisa's classroom, where she was seated reading to three students while the rest appeared occupied if not absorbed by their history books.

Ms. Lopez, as they called her, wore

a belted white dress with her wavy dark-brown hair swept back behind the broad shoulders about which she had complained so incessantly back in college; for all her complaints they still looked very feminine on a woman only five and a half feet tall.

She got up and came over as I entered, smiling pleasantly. "Are you ready to get your stories?"

"Sure." Actually, I was self-conscious. It had been ten years since I'd been inside a junior high, and then I'd been a student. Being six inches taller than the teacher was a new experience for me.

"You can take a couple of chairs and go sit in the hall and I'll send kids out to you."

I followed her instructions and in a moment was sitting in the corridor with Tina Gonzales, a small girl with big brown eyes and curly hair she wore in a ponytail. When I told her I wanted to hear all about La Llorona, she shook her head sternly, her wide eyes growing even wider.

"I don't know why you'd want to talk about *her*. I'm scared of her!"

"Why does she scare you?"

"I just don't like talking about her. You're not supposed to. It's s'posed to be bad luck."

"Like she'll come after you if you do?" I asked.

"Yeah, I guess, in a way."

"If you don't like to talk about her, why are you still sitting here?"

The brown eyes flashed me a dirty

look. "Well, you knowww ... it's not like I believe you can see her in the girls' bathroom or anything like that."

"Some girls think they see her in the bathroom?"

"In the mirror." She kicked her black cotton shoes against the chair leg nervously. "They cover up their heads with their sweaters and call out, 'La Lloroooooona...'" and when they look in the mirror they think they see her standing in back of them. We all used to do it when we were little kids."

"What does what they think they see look like?" The question sounded stupid to me, and she looked like she thought so, too.

"I guess it was just her white dress or something."

This was as far as I would get with that line of questioning. So I asked her to tell the story as she'd heard it.

"Well, you know the whole part about how she killed her kids, right?"

"Just tell it from the start as if I didn't know anything," I said, waving my hand.

"All right, this is the story I heard. The Llorona was a lady from Mexico and she had two kids and they were always crying, and one night ... I don't like talking about this!" She was looking at the floor, the ceiling, everywhere but at me.

"It's okay," I said, "telling a story can't hurt you."

"That's what *you* think!" She paused, and I thought she was going to stand up and go back in the classroom,

but she seemed to win the argument with herself and relaxed a little. "So they were always crying, and one night she got so tired of hearing them cry that she took them both and threw them in the ocean and killed them."

"The ocean?" I interrupted. "I thought she threw them in the river."

Again, the look that said I was an idiot. "Where in the heck would she find a river around here?"

She had a point. "Go on with your story; sorry I interrupted."

"Well, after she threw them in the ocean she felt real lonely and wanted them back and every night she'd go up the streets crying for her kids, and she would only come out like during the night when no cars were coming by and it was real quiet. And she still comes out at night crying for her kids, even still now she does. That's why you can't really see her in the bathroom, 'cause she only really comes out super-late at night."

"Have you ever seen her?" I asked.

She answered very softly. "One time I heard her going through 25th Street, her cry was coming from under the bridge, down in the wash. My Uncle Frank told me he seen her in Mexico, and like all she looks like is a white shadow."

"Where in Mexico was this?"

She shrugged her shoulders. "I dunno. Mexico Mexico."

I eventually lost track of how many kids I spoke with as the periods went by that day. An infinite number of rel-

atives had seen her in innumerable different places and situations; her favorite spot in the barrio was one of the short bridges over the dry wash, a nice connection to the published versions of the tale, which tell how she wanders the dry riverbeds looking for the spirits of the children she drowned in the village stream.

It was midafternoon when, after thanking Lisa and saying goodbye, I walked to the parking lot, dreading the oven into which I knew my car's interior had been transformed.

"Hey, mister!" The voice, sharp and sudden and right behind me, made me jump. I wheeled to see a short boy with light-brown hair and the first stages of a pot belly, dressed in a T-shirt and khaki pants. "Are you the guy who's asking about La Llorona?" he asked in a squeaky little voice.

I hesitated. "Yes, I was. I am."

"Take this, then." He pressed a bullet-sized wad of folded paper into my hand, then turned and walked rapidly away. Before I could call after him, he had vanished behind one of the building's jutting corners.

Unfolding the note, I found this story written in a determined but messy scrawl. I've left the spelling and punctuation intact.

A long time ago I was walking dawn 26 street by the bridge all I sees was a white shadow and I herd criye and this voice asks me if I gots a soul I got scerd and ran hom.

Chuckling, I refolded the note and put it in my pocket.

II

A few nights later I was returning late from the library when I heard the phone ringing inside my studio in the graduate dorm. Fumbling like a three-in-the-morning drunk with a Möbius strip for a keyring, I finally got the door open and ran to the phone.

"Steve?" It was a woman; she sounded like she thought she had a wrong number.

"Yes. Who is this?"

"Lisa Lopez. I've got some information you might be able to use in your Llorona project. About three weeks ago, one of the local cholos was found strangled in the wash. Did you read about it in the paper?"

"I'm afraid I don't even know what a cholo is," I admitted, trying to catch my breath.

"A cholo is, well.... Normally a cholo is a tough guy, a guy who hangs out on the street. But a lot of my best kids get called cholos by some of the other teachers, and they're really well-behaved boys who just *look* tough."

"I take it this kid really was a troublemaker."

"Everybody says he was involved with drugs, selling them. If it's big enough to get killed for around here, it has to be heroin. That's another subject I don't like to bring up, since it starts people saying that everybody in the barrio has a needle in their arm."

"I understand," I told her, although I knew no more about heroin than what could be learned by watching reruns of *Baretta* on TV.

"Anyway, one of the kids came in today and caused a big stir. She was telling everybody that her great-grandmother knew for a fact who it was that killed him ... that he was killed by La Llorona!"

My mind clapped its hands in triumph at what she was saying; here was a social use of the legend not just as a moral for mothers and children, but to punish sinners of a completely different kind. Lisa gave me the address of the student's home where the great-grandmother lived, and said she would set up an interview if she could.

Now, I thought, I was really going to have a thesis.

It was five o'clock in the afternoon, but the barrio was still sitting in a shimmering puddle of noontime heat as I picked up Lisa at her school and we drove on into the neighborhood for the visit we had arranged, and which she would translate for me.

We pulled up in front of the house, a white wood-frame about the size of a three-car garage; the front quarter of its floor space was taken up by a pleasant-looking porch shaded by ivy and geraniums. As Lisa opened the door, three girls, ranging in age from perhaps 7 to 12, came tumbling out of the house to surround her. Trailing behind as they crossed the lawn talking

excitedly, I felt more than a little out of place.

"Ana, Cathy, Susana, this is Mr. SORTEAUX," Lisa said when they all paused for breath simultaneously, and I was greeted by a chorus of suddenly shy hellos.

"Susana, traenos unas sodas por favor." Unnoticed behind the ascending stairways of flowers on the porch, the hunched form of Mrs. Aguilar now surveyed us calmly, herself brightly colored in a flowered dress. All three girls vanished inside the house and quickly reappeared carrying glasses full of ice and bottles of Pepsi dripping with moisture. I was introduced once again as the girls retreated into the house and we sat on two kitchen chairs that had been set out for us.

There followed almost half an hour of polite conversation about the weather and goings-on at school. The old woman's voice, stretched taut by age, was still clear and full of communication, and she would laugh in a relaxed way that spoke of current as well as past joys running through her life.

Finally, just as confidently as she had refused to discuss the desired topic, she brought it up. "I understand you are interested in our visits from La Llorona."

"Yes," I spoke up eagerly, understanding even without Lisa's translation. "I heard that you feel she was responsible for the death of a boy in the wash a few weeks ago."

She nodded her head slowly, her neatly braided hair catching tiny glints of sunlight as they filtered through her flowery walls. "La Llorona is responsible for many things."

"What kinds of things?" I asked.

"She is responsible for the deaths of her children. She drowned them because they interfered with her sinful life."

"What about in Cucamonga? What kinds of things is she responsible for here?"

"Much less than she is thought to be, yet much more than many people think." She nodded again, as if this cryptic answer were supposed to be full of enlightenment for me.

I decided to take it step by step. "The kids think that they can see her in the bathroom at school when they turn off the lights. So you think they really do?"

She laughed, a deep soft laugh that never really escaped her mouth but nonetheless could be heard. "The children who see her in the mirror see only their imaginations. She does not come when they call her. She comes to see only those who are as accursed as herself, those who have souls to give.

"Where in Cucamonga does she come?" I asked.

"Where does the water flow when it rains?" she replied.

This is the sort of colorful, folk-wise answer that's supposed to please anthropologists, but it was driving me crazy, my predicament no more bearable.

ble because Lisa smiled in appreciation of each carefully constructed response as she translated it.

"In Mexico they say that La Llorona walks through the dry river beds," I said. "The boy who was killed, was found in the wash. Is that why you think he was killed by La Llorona?"

"That is what many people say."

"What would happen if I were to go out into the wash?" I asked. "Would I see her?"

"That would be very foolish." She spoke with the same tone of authority she wielded on the three girls when we first arrived, and there was a no-nonsense look in her eye. "To study and to discuss La Llorona is one thing, young man. That is probably a very good thing to do, because she is an important example for all of us. But to seek her out is to seek death; even worse, it is to seek the loss of one's immortal soul."

"But I am not a sinful person," I insisted, wading through Lisa's skeptical glances. "Why would I be in danger from La Llorona, since she comes only for people who are already damned?"

"La Llorona comes to see some, but she is seen by others. She is a seeker of souls."

"In other words," Lisa added to her translation, "she's not somebody you want to go wandering around in the dark looking for."

"In England and Ireland," I continued, "there are legends of the Will o'

the Wisp, who lured people to their deaths in the marshes by lighting torches ahead of them and then leading them down the wrong paths. When the scientists finally figured out what was happening, they found that the lights people saw weren't the torches of Will o' the Wisp, but gases, created by the rotting plants in the swamp. The gases would catch fire and looked just like torches in the darkness.

"Do you think there could be some explanation like this for some people seeing or hearing La Llorona?" I paused a moment. "I mean, you said that some people who think they see her don't really see her. Could there be some times when, say, the wind blows and people think they hear her crying?"

When all this had been translated, Mrs. Aguilar sat for almost a full minute without answering. I think we both felt the question had offended her, but when she finally spoke, there was no discernible change in her attitude.

"Our dreams are always about possible things," she said slowly, looking over each new word carefully as if she were examining fruit in a market. "We dream of things that could be as well as of things that have been. If we dream about a horse, does that mean there are no horses? If we hear the sound of crying in the wind, does that mean there is no crying? If we dream something, isn't that enough to make it real?"

III

There are some anthro students who

are drawn to the field by the ideas of such men as Erich Von Däniken, who believe each legend and story of every culture they study is established on some supernatural occurrence. There are others to whom every phenomenon is explicable by the empirical methods of the conventional sciences. The rest of us, unsteered by such dogmatic convictions, hover somewhere in between. We are the agnostics of the Study of Man.

So it was that I now found myself unsure about what course to follow in this project. If I were to continue with my original plan, I would have to repeat my interview procedure in a number of local communities, then use my vacation to continue the survey in Arizona, Texas and Northern Mexico.

The Will o' the Wisp legend kept coming to my mind: could there be some local phenomenon here, too, that contributed to such a widely shared communal belief, something more than the social forces of suggestion and communication? Mrs. Aguilar wouldn't discuss it, but perhaps in the moonlight the wash looked as if a woman in white were walking there, or the wind blowing under the bridges would howl and sound like someone wailing eerily.

Before I could go on with the mundane process of interviewing others who believed they had seen or heard La Llorona, I decided, I had to become some sort of primary source myself. Even if it meant only that I had gone there at night and seen nothing, I had

to have given myself the chance.

It's very difficult for me to write about what happened on that first series of nighttime visits to the Cucamonga wash. My notes of those evenings survived, fortunately, and I include them here in abridged form to detail exactly what occurred.

*Thursday night, April 17, 7:45 P.M.
The Arrow Highway bridge over the wash.*

I have the Pontiac parked on the shoulder of the old little-used highway where its two lanes cross the wash one block north of the barrio.

Looking out the passenger window with my binoculars, I can see three more bridges just like mine, each one block farther south, each illuminated by a single streetlight. I remain in darkness, since my bridge sits not in a residential zone but in an adjacent area still devoted to vineyards.

I'm not sure exactly what I'm looking for, but I presume I'll know it when I see it. The wash at this point is less than twenty-five feet wide, a piece of the lunar landscape bleached and laid out as a rocky white-and-yellow carpet to welcome some arriving alien from an equally desolate world. Its walls are lined with concrete to keep the floodwaters from tearing out a different channel through the community as they flee in panic from the mountains only a few miles to the north.

I pass the time taking notes by flashlight, singing along with the radio

to try to fight the boredom. It's going to be a long night.

5:30 A.M. All I've discovered during the night is that bad stations will invariably garble good ones on the radio after ten o'clock. The music that keeps me awake always seems to have an hysterical preacher's sermon substituted for the second chorus, then segues back to the pacemaker beat of the song before the disk jockey aims one more tired joke at "you night people who really know how to live!"

I'm going home.

Friday night, April 18, 8:00 P.M. At the bridge.

I'm back at my station, a thermos of tea added to my arsenal of sleep-fighting weapons. Skipped two classes and got seven hours of sleep today, so I'm ready to see whatever's ready to be seen.

Last night's scattered clouds have given way to clear skies, as starry as is possible within fifty miles of Los Angeles, with a stylish crescent-moon illuminating the wash. Except for a couple of sorties into the vineyards to keep my bladder from bursting, I continue to stay locked in the car.

2:10 A.M. Three guys in their late teens just came staggering through the wash towards the barrio, drunk as skunks and singing at the top of their lungs, to the tune of *My Darling Clementine*:

La Llorona, La Llorona, La Llorona,
don't you cry!

I'm not wicked, I'm just wasted,
And I'll live until I die!

Maybe everybody around here isn't as scared of the ghost as they seem to be.

5:30 A.M. Nothing new. Going home.

Saturday night, April 19, 8:50 P.M. At the bridge.

I wasn't even going to come back again tonight, but I slept in until three in the afternoon, and figured I wouldn't be able to avoid staying up all night anyway. Besides, I've seen all of tonight's late-late movies at least twice.

Maybe it's inertia that brought me back, so much built-up momentum that the laws of physics require me to complete my action and spend one more night waiting for La Llorona. Or maybe I just have a subconscious love for the feeling of the hunt.

Whether I be pushed by inertial waves or pulled by internal ones, I'm here, and I'll brave the boredom to stick it out one more night. What have I got to lose?

"What have I got to lose?" Lisa read the last line to me and I laughed; she joined in half-heartedly. "You almost lost both eyes; you could have had your neck broken; you *did* break your arm...."

"Upon such sacrifices, my Cor-

delia, the gods themselves throw incense."

"Hey, Steve, I was in Young's Shakespeare course with you, so don't try your poetic B.S. on *me*. Besides, it wasn't King Lear who was blinded, it was Gloucester, and if you aren't careful this paper of yours is going turn into a tragedy, too!"

I ran fingers over the bandages covering my eyes. "I guess this was kind of a close call."

"So tell me what happened!" I could hear her pull the chair closer. The occupant of the other bed, a 16-year-old who broke his arm skateboarding, was down in surgery. So we were alone.

"Well, it was a few minutes after one in the morning — that was the last time I looked at my watch." I tried to gather up the scattered memories of the previous night; with the pain-killers swimming through my brain it was like looking for broken glass in a thick carpet. "I had just finished pissing out in the vineyards and climbed back into the car, and I was feeling really depressed and pessimistic. No matter how many different times in how many different lights I stared at that damn wash, moon high in the sky, moon low in the sky, clear or cloudy, I couldn't imagine seeing a woman walking through it in a white dress or hear someone crying for her children. Without even seeing your face I can tell you think I'm crazy."

"I didn't say that!" she retorted.

"Just go on with your story."

"Anyway, when I was sitting there in the car thinking I was just as much of an idiot as you think I am now, I saw a pair of headlights in my rear-view mirror.

"All of a sudden they started honking their horn, and I thought they were honking at me. I was about to tap the brake to flash the tail lights when I looked up in the mirror again. I still saw the car, but walking right in the middle of the road, right in the path of the car, was a woman in a white dress and shawl."

"No, Steve!"

"The car swerved to the right, and it hit the asphalt curb behind me — it must have been going awfully fast — and crashed into the trunk of my car. All I had time to do was duck down, and I remember hearing the crunching sound of the first impact, but that was all. The car, I think it was a big Cadillac, apparently took the top off my Pontiac, then kept right on going over the railing of the bridge into the wash and exploded."

"The paper said the driver burned to death. If you hadn't ducked ... if that car hadn't hit the curb so it sailed high enough to slide over you.... There was a picture in the paper! Have you *seen* your car?"

I turned my bandaged eyes towards her, smiling playfully. "Seen my car? Can't say that I have."

"Oh, Steve, I'm sorry...."

I laughed. "It's okay, Lisa, I'm just

giving you a bad time. There were only five tiny fragments of glass that scratched the surface of the eyeball and lodged in there, but they were off to the side. So my vision was never really in any danger. They tell me the eye is one of the fastest-healing parts of the body; I get these bandages off tomorrow."

"But how can you be so casual about the whole thing?" she asked.

"The eyes," I said, "I can be casual about, since they don't hurt and I know they're okay. The twisted neck feels more stiff than anything else, and the arm ... well, I can have people sign my cast like everyone did back in high school, and be casual about that, too. What I saw in the middle of the road, that, Lisa, is what I can't be casual about."

"Come on, now, you don't really mean to tell me that you think that was La Llorona!" Her words formed a statement, not a question.

"What I saw *could* have been just an old woman. But she stood her ground in the middle of the road, calmly, with a big Cadillac coming right at her. If she were an old lady, she's either very brave or very senile. But what if it *wasn't* just an old lady?"

"I can't accept that," she said flatly.

"Well, whoever or whatever it was I saw, there's one more fact that convinces me I've observed what the people of Cucamonga call La Llorona."

"What's that?" The chair creaked as she leaned forward.

"The most crucial detail of all. I could hear her crying."

IV

Lying there in that hospital bed, I had the chance to do a lot of thinking.

I remembered how when I was eight years old I could look at the teeth of any animal, living or fossilized, and describe the nature of its diet accurately. At ten I could expound upon the reasons for the dinosaurs' extinction or recount the excavation of Pompeii. If a culture had been legitimized by its inclusion in *National Geographic*, I had a file card on it before my junior year of high school.

Now I had visions of a book sitting on the shelf in the Faculty Publications section of the bookstore, titled *From Astlán and Back Again: The Myths and Folklore of the Mexican-American*. I could see myself walking into the same basement rooms where I now attended classes, being the lecturer instead of the lecturee, spending four months of the year traveling and doing research, always seeing new places, new people. It had grown more refined over the years, more details squirreled away in the crannies of ambition, but it was the same old dream.

But the students in our department all know very well just how few of those dreams are waiting for us at colleges and universities around the country. With the glut of Ph.D.'s on the market, most of us will end up being Budweiser salesmen with bookcases by

the door full of *National Geographics*. And each one of us says, "Well, I'm damned if it's going to be me."

Maybe I *am* damned, but this was my motivation for going on with a project that had already killed one person and landed me in the hospital. I wanted that shot at the Faculty Publications shelf; no matter what, I told myself, I *will* succeed. No matter what.

The words sound hollow now.

By the time Lisa drove me home, I had up a head of steam that even she was unable to discourage with her vivid descriptions of the dangers of the barrio after dark. When that didn't work, she accused me of trying to exploit the Chicanos of Cucamonga in order to further my own career, that I didn't care about the people or their culture, only about whether I got a job. That one hurt. It took the wind out of my sails, replacing it with a calm of resentment that left us riding the rest of the way back to the grad dorm in uncomfortable silence. This was not the way I'd planned it would be. We'd grown closer during the six days I'd spent in the hospital, where she'd visited me every afternoon, and I had pictured us spending a pleasant evening with her playing nurse and me her willing patient.

Instead, I climbed out of the car and we exchanged perfunctory see-yous before she pulled the door shut and drove away. Balancing the shopping bag of things she'd brought me on

my good arm, I walked through the clammy mist of the late-April overcast to my apartment. My enthusiastic determination of only an hour before had fallen to the sullen, depressing realization that not only did my arm and neck both hurt like hell, but I had thoroughly messed up what I had hoped would be my love life, even as I was getting behind in my classes. I felt like somehow going back to third grade, when your mother could hold you and make all your troubles go away.

Through a week of cold spring showers and days when gray paint seemed to wash over everything I saw, I trudged back and forth from the grad dorm to classes, the library, professors' offices and the Student Health Center. I had the feeling, trussed up in my cast, sling and neck brace, that everyone looked at me from corners of their eyes, staring at one of the walking wounded from some distant, secret war who had wandered onto their campus.

Fortunately, the professors and instructors took one look at all my paraphernalia and started shortening papers and postponing deadlines. To celebrate on Friday night I treated myself to a shrimp cocktail (the only affordable concession to my seafood fetish), and it was while I was chewing the last piece of meat as slowly as possible that the phone rang. It was Lisa.

"I just thought I'd call up and see how you were doing." Her voice sounded pleasant, the tense ride home

in the car forgotten. Or at least ignored.

"I'm all right, I guess." I felt my mood rising already. "I've come down a little from the great sense of mission I built up in the hospital."

"Well, if I tell you something interesting that has to do with your project, will you promise you won't go overboard again?"

"You have my promise," I lied blithely.

"Good. Now listen to this. Do you recall the name of the man who was killed in the accident?"

"Felipe Sarmiento, age 36," I recited from the newspaper clippings she'd cut out for me.

"Exactly." There was triumph in her voice. "He was one of the most hated men in the barrio, the local source of supply for just about all the dope in town. One time another guy bought a car that people said was nicer than his, and he paid some guys to go over and shoot out the windows. They ended up setting it on fire."

"And he burned to death in his car," I murmured.

"Did you tell anyone else you thought it was La Llorona who caused the accident?"

"Are you kidding?" I laughed. "I saw *One Flew Over the Cuckoo's Nest!* I'm not going to run around telling everyone silly stories."

"Well, the rumor's around town anyway. That's a pretty remarkable coincidence, since you were the only

one who actually saw the old woman in the middle of the street."

"Two murders attributed to La Llorona, and both are involved with the local drug trade." I was thinking out loud, looking for more connections. "If I hadn't seen the accident with my own two eyes, I'd think it was the work of vigilantes or a falling-out among thieves. Maybe I could learn some more about it if I went back to the...."

"Don't even think about going back there at night!" she interrupted. "You'll just get yourself hurt again or killed, and I don't want any part of it."

"Then why in the hell do you call me up and tell me all this stuff that gets me motivated? Is it just for the sheer pleasure of shooting me down again?" I was surprised by the anger that flashed out of me, uncontrolled. "I thought you'd decided that I was out to exploit the barrio for the advancement of my career, the cynical outsider buying Indian pottery for pennies and selling it to collectors for thousands of dollars per piece."

"Hey, Steve, lay off. I've had a lot of mixed feelings about this, and maybe I do seem to go both ways on it with you, but I think my concerns are legitimate. There are a hell of a lot of gavachos — whites — running around spouting lots of high-sounding phrases about helping the poor people in the barrio or recognizing the importance of Chicano culture and how the dumb Mexicans deserve everyone's pity.

After a while they move on to greener pastures, and everything's still the same. All the Mexican culture most people want they can eat at the Taco Bell or see at the bullfights in Tijuana. When it comes to the real beliefs, the values of the people, they start asking, 'why don't those Mexicans want to be like everybody else?'"

"You know I don't feel that way," I said defensively.

"I know that, but I also know that for all your studies and your degree, you don't know more than the most superficial aspects of Mexican culture, let alone all the permutations of the Chicanos in the United States. You're studying the Llorona in a vacuum."

I tried to be as sarcastic as possible. "So why do you keep helping me? Are you from the Mexican KGB, assigned to keep an eye on the suspicious outsider?"

"I'm helping you because at least this seems to be some project that doesn't show all Chicanos as vicious gang members or job-stealing wetbacks. I liked how you were looking at the social function of the story, how the community used it to promote moral values for the family, even in the worst situations. That's where you finally began to stumble across real Mexican and Chicano culture, the ways people try to keep the old values in a new country that doesn't respect them. But you *did* respect them, and even though you sometimes make me mad as hell with your goddamn

academic condescension, that's why I'll still help you. I'll see you."

Then she hung up, leaving me half angry, half embarrassed at my anger. I had been elated that Lisa was no longer mad at me, and then I'd turned around and purposely made her mad at me again. Even my shrimp cocktail was gone, just half a cup of blood-red sauce, every shred of meat seined out and eaten.

Wriggling my cast through the sleeve of my jacket, I counted the change in my pocket and set out to walk to the store. Some things in life are beyond our control, but at least with shrimp cocktail you can always go out and buy another jar.

V

Later that night, my will restored by my luxurious meal and two glasses of Chablis, I sat staring at a map of Cuca-monga and tried to figure out how I could get back to the wash with no car, no help from Lisa, and some degree of safety from whatever it was that had forced the drug dealer's big car off the road. The parameters didn't look very promising.

Over and over again I ran my finger up and down the narrow line on the map labeled "Deer Creek," the official — and unused — name for the wash. Its clear blue ink on the paper was an ironic euphemism for the sun-scorched, rocky channel that slashed raggedly through the ancient flood plain.

On what I had determined was to be my last pass along the twisting route, my finger rested on the symbol that told me there might yet be a way to pursue my goals: sitting right on the corner where 26th Street crossed the little blue line was a purple cross. A church. With its view of the wash, it was the perfect place to seek protection from any supernatural creature searching for souls, and from more mortal dangers as well. Lisa had told me the churches were left open all night and were never vandalized. So it would be the perfect haven in a tough neighborhood.

The excitement came rushing back to me, knowing I was on the attack again, not just sitting around reading. My vacation could wait till summer; now I had *work* to do.

It was early in the evening of another smog-soaked day, the oppressive heat returning with me to the barrio. Perspiration kept running down the small of my back as I walked down the narrow road between two fields of grapes; the black shirt and pants I wore were sticky and uncomfortable, but I wanted to blend into the nighttime landscape, and the discomfort was the price I had to pay.

Only ten minutes after I'd stepped off the bus the church lay directly before me on the northern side of the street. The building itself was a plain, stucco-walled structure, with one long windowless side facing the wash across the parking lot. At its back sat a large

blue dumpster piled high with trash.

Walking as nonchalantly as I could, I crossed the parking lot and sidled up to the trash bin, glancing around to make sure no one was watching. Stretched long and thin on the rack of the departing sun, my shadow screamed for attention at this moment when I wanted to be as inconspicuous as possible, and the stench of the fly-covered garbage, heated for days in the pressure-cooker temperatures, made me want to gag.

I took a deep breath and circled to the back side of the huge metal box; there I found a haven safe from prying eyes and, fortunately, upwind from the odor of decomposing food. Protected on three sides by a fence, the church wall and the dumpster, I still had an unobstructed view of the vineyard and a long stretch of the wash and could peek around the trash bin's edge to watch the bridge and street.

Having reached my hiding place unobserved, I sat down on the pavement and leaned back against the church wall to wait for nightfall, taking notes to pass the time. Much of what I wrote was endless rehashing of my feelings for Lisa, but the portions devoted to this project form an accurate record of my thoughts at the time. So I include them here.

Saturday night, May 3, 7:25 P.M. Behind the church.

There may really be some senile old lady who wanders around here at night

crying, becomes associated with the story through the coincidental resemblance, and is simply in the right place at the right time to cause the accident in which I got this cast. Not likely, but possible.

Or some woman may have consciously taken up the role, representing La Llorona to the community as a sort of spiritual vigilante, in time coming to believe in herself so deeply that she has the iron nerve necessary to stare down a speeding Cadillac. Again, not likely, but possible.

Or ... there is some sort of noncorporeal creature that stalks the wash stealing the souls of those sinners unfortunate enough to meet her. Not likely, but I have to admit it's *possible*.

Whatever the explanation, this consecrated ground feels safest to me.

The definition of the possible, I'm beginning to think, is beyond our conception, beyond our ability to reduce to definable functions. The possible is what has been observed to happen. The impossible is that which we never have known to happen, that which has not happened yet.

Everyone quotes Sherlock Holmes telling Watson that when you have eliminated the impossible whatever remains must be the truth. But *can* you eliminate the impossible? Holmes himself said it's a mistake to theorize before one has data....

A casino in Atlantic City has a line on whether Little Green Men will visit Duluth this year. Since it can be ex-

pressed in odds — probabilities — does that prove such an event is possible?

Maybe not, but it makes it a lot easier to sit here and not feel like a fool.

1:20 A.M. I have solved the mystery of La Llorona in Cucamonga.

About ten minutes ago I was sitting staring at the wash, thinking for the one millionth time that this whole project was crazy, when wandering down the street towards the bridge came the figure of an old woman in white. My heart stopped beating and started vibrating: the figure seemed at least similar, if not identical to the one I saw in the middle of Arrow Highway the night of the accident. This could be the person mistaken for La Llorona — or La Llorona herself.

I stuck my head out from the side of the trash bin to keep her in sight as she approached, trying to memorize every detail of her appearance: white shawl, long white dress, shuffling gait. Even half a block away there was no mistaking her.

She crossed the bridge, face down so that it always stayed in shadow. Fear began to grow inside me now, trying to elbow aside the excitement for control of my emotions. Would her face be beautiful, as in some of the legends? Several of Lisa's students had said it would be a *calavera*: a fleshless skull. Or would it be just the normal face of an elderly woman?

She paused at the corner, looking

around as if undecided on which road to follow.

Suddenly I could hear it, and I wanted to scream; she was crying! It was soft, not at all like the wailing of the stories, but it was the same sound I had heard just before the crash!

"It is her!" I said to myself in a voiceless whisper, my lips forming the words but no sound coming out.

But to the woman it was like a shout: she turned in my direction, and after only a moment's hesitation started coming straight towards me, staring through me with eyes still shadowed by her shawl.

I pulled my head back, but I knew it was too late. Some stray movement, some decibel of sound, had alerted her to my presence. I planned the route along which I would run to make my escape; La Llorona or not, she was only an old lady. There were no legends of her flying or possessing unnatural speed.

I picked up my little Kodak, checked the flashcube, and took a deep breath. Telling my legs to be ready to run, I stuck my head out into the open and, steadying the camera with my elbow on the pavement, framed the woman carefully in the eyepiece. She was less than ten yards away, now clearly identical to the woman I had seen two weeks before, walking with the same determined shambling pace I remembered so well. I squeezed the shutter button as calmly as I could and saw her face illuminated clearly for a split second in the glaring light of the flash.

Instantly, I felt very stupid. In that moment I had seen the face of an old woman, deeply wrinkled, one hand holding a Kleenex to her eyes.

Deadly monsters do not carry Kleenex, a rational corner of my mind called out. Instead of running away I got to my feet and sheepishly approached the old woman.

"*Pardoname, senora,*" I said, trying desperately to remember how to apologize in Spanish. "*Yo no ... pardoname.*" I stammered *pardoname* a few more times because it was the only word I felt sure she would understand.

"*¿Tienes tú un alma para mí, señor?*" she asked, ignoring my remonstrations. There was deep sadness in her voice, but it wasn't clear if she were senile or merely a cogent person in a deep depression, and it was hard for me to decipher what she said. After a moment I connected *alma* with alms and realized she was asking me for money.

Groping furiously through my pants pockets, I regretted not having brought more change to pay for my guilt and embarrassment. All I had was a dime, a nickel and a smattering of pennies, and I dropped them into her hand so clumsily that the dime fell to the ground, rolling underneath the trash bin.

She stared at me for a moment, those sad eyes gazing out from beneath a high forehead, her long white hair parted neatly in the middle and covered with a delicate white lace shawl. Her once-graceful fingers were knarled and twisted as she held my coins in

her open palm.

"No, *señor*," she said, finally, "no puedo tomar tu alma. Ya debes regresar a tu propia gente." What she said next was much softer, and I'm not sure I wrote it down correctly; it sounded like, "Me pueste ver, pero amas me puesten tender." When I get home I'll have to look up what all that means, but she placed the coins back in my hand, and that, together with the words I understood, gave me the message: "I can't take your money and you should go home."

As I write this I can still feel a tingle in the palm of my right hand where the coins came to rest; I'll always remember the pride in her voice when she handed them back to me.

So I've found the answer to the mystery of La Llorona. As I had hypothesized, there really is an old lady who wanders down the streets of Cucamonga at night, crying as she crosses the bridges over the wash. That, plus a little superstition, was all the legend needed to flourish here, a small coincidence serving what Lisa has convinced me is an important social function.

All that remains is for me to go back to the bus stop and idle away three-and-a-half hours until the first express comes by at 5:00 A.M. I've wiped my hand on my pants so many times I've chafed the palm; am I trying to wipe away my guilt over ambushing old ladies?

Time to start walking.

VI
By Tuesday I had realized that the final chapter of my paper might not be so easy to write after all: clearly visible on my right palm were a number of blistered, leaking burns, each one the size of a penny or nickel. Together they made a perfect map of where the coins had rested when the woman dropped them back into my hand.

Or, I should say, when La Llorona dropped them back into my hand.

Watching the burns grow worse and worse for three days, the blisters rising from the painful, reddened skin, I couldn't forget how easily she could have killed me, as I now accepted she had killed the others. If she could make tiny coins burn my hand this badly, what could her own touch do?

When I consulted my Spanish dictionary at home, I found that part of what she had said was easy to translate. *Puedo* means "I can" and *tomar* means "to take." So I could assemble *no puedo tomar tu alma* into "I can't take your alms." A little more jumping through the pages turned *Debes regresar a tu propia gente* into "You should go back to your own people." With proof of her existence literally in the palm of my hand, it was advice I was ready to accept.

But *Me pueste ver, pero amas me puesten tender* became no more intelligible on paper than "You can see me positioned, but you all love me positioned stretched out."

I wished I could call Lisa and get

her help, but I remembered all too clearly what she'd said the last time we'd talked, that she felt I was studying La Llorona in a vacuum because I didn't really understand Chicano culture. If I called her now and told her what happened, she'd tell me I was going in the wrong direction again, and then she wouldn't want to talk to me about anything.

On the other hand, I argued with myself, if I really did end up having a relationship with Lisa (a goal I had adopted without ever having consciously decided to do so), could that relationship be a good one if I had to keep all sorts of secrets from her?

Before I could think of an opposing argument, I went to the phone and punched her number faster than I can type an overdue paper. She answered after only three rings, sounding happy to hear from me, then listened quietly while I told her the whole story. As I talked I couldn't tell if she were angry or interested, and so all I could do was keep going until I'd covered everything.

"Well," she sighed when the moment of truth had arrived, "I guess that really does begin to mean something, doesn't it? Burns aren't the sort of thing that you can imagine."

"You sound disappointed."

"In a way; I couldn't really tell you why. Maybe I was a lot more comfortable with the story when I assumed it was just a projection of people's everyday fears. I feel like you're explaining

objectively something that wasn't ever meant to be explained, like describing the Mona Lisa in terms of the chemical analysis of the paint instead of the colors and the form."

"I know what you mean," I admitted, "but it's still really exciting to me. And I'm not tearing down anything, not disproving part of the traditional world-view of the people."

"All right," she said, laughing, "I hear you working on my weaknesses. I have to admit you've got me curious about when that film will come back."

"I'll probably have to wait till Friday. I walked it over to the camera shop downtown on Monday, and they sent it to the lab with special instructions for hand processing. I don't want to take any chances with having some idiot spoil all my work."

"I don't know why I'm asking; I'd be terrified to even look at her picture after what she did to your hand."

"That reminds me, do you know any good remedies for burns? This one is killing me, and the stuff the pharmacist recommended hasn't done a damn thing."

"My mother used to soak burned fingers in a bowl of lukewarm tea. Too bad I'm not a *curandera*, or I could give you fifty cures."

"What's a *curandera*?" I asked.

"They're people who know all the folk remedies for everything, all the herbs and roots and so on. Every town in Mexico has one; most of the barrios do, too. They throw in magic, faith-

healing, a little bit of everything."

I had lost all skepticism towards Mexican magic. "Is there one in Cucamonga?"

"I suppose so; I never thought to ask. Are you serious?"

"Very serious. This hand *hurts*."

"I'll ask the kids first thing tomorrow."

She was about to hang up and go to bed when I remembered the initial reason for my call. Jumping across the room, I grabbed my notes and ran back to the phone. "I need you to translate this for me: *Me pueste ver, pero amas me puesten tender*."

"Are you sure you got it down right?" she yawned. "Like that it doesn't make any sense. Read me the whole thing over again."

With my best college-Spanish accent, I recited, "*No, señor, no puedo tomar tu alma. Ya debes regresar a tu propia gente. Me pueste ver, pero amas me puesten tender*."

"You really did twist it up! It should be, '*Me puedes ver, pero jamás me puedes entender*!' That means, 'You can see me but you can never understand me!' God, Steve, that's scary! And why didn't you tell me before about what she said about your soul?"

My jaw dropped. "My soul?! Where does she talk about my soul?"

"I thought you said you looked it up!" She gasped as she understood my mistake. "Steve, *alma* means soul! She wasn't asking you for money! She was asking for your soul!"

The terror had faded only a little by the time Lisa called me back the following afternoon. She had found a *curandero* and had arranged an appointment the next day to which she would drive me. My hand had gotten worse instead of better, despite three different salves, steeping it in bowls of tea, and a visit to the Student Health Center. The blisters leaked a foul-smelling pus and the skin had turned an ugly brownish-orange color that made me remember *The Snows of Kilimanjaro*.

The doctor had reassured me that it wasn't gangrene, diagnosing it as a staphylococcus infection common with serious burns. I was given antibiotics along with pain pills strong enough to take an elephant on a trip with Carlos Castañeda, but even with two of them in my system the hand still ached so badly that as we knocked on the door of the *curandero's* freshly painted house twenty-four hours later I felt like crying from the pain.

Ramon Hernandez was a heavy-set man of medium height, with jet-black hair combed straight back from his deeply tanned forehead. As he opened the door and greeted us pleasantly, he was wearing dark slacks and white linen shirt with delicate embroidery running in parallel strips down the front, curving with the gentle bulge of his stomach. He invited us in, and we stepped into an affluent living room incongruous to the barrio: thick carpeting; a fancy stereo and large modern

television; crushed velvet sofa and loveseat; track lights on the ceiling; a large air conditioner droning in a side window. I began to worry about how stiff his fees would be, even though Lisa had assured me that they floated with the client's ability to pay.

After offering us some coffee or wine, which we declined, he led the way back through a hallway to a bedroom that had been converted into his office. The bed was raised to table height in the center of the room, and before the window that provided what little lighting there was sat a tall bookcase topped with small religious statues painted in bright colors; the remaining shelves held votive candles in glass containers of various colors. Another small air conditioner rumbled in the windowframe behind the bookcase, making the room pleasantly cool.

Mr. Hernandez positioned me on the bed with my head towards the makeshift altar. "First, we will light the white candles, since white represents ice and we wish to cool your burns." His English was accented but clear and easy to understand. "I will be treating you with a combination of herbal medicines used in my family for hundreds of years, and an appeal to God for help in healing your spirit. Are you Catholic?"

"No, I'm not," I answered, suddenly afraid he might not treat me.

There was no change in his expression. "Are you Christian?"

"Yes." I'd been raised by the Gold-

en Rule, and so I assumed my answer was accurate.

"Fine. Would you please take the bandage off your hand so that I may examine the burn?"

Gently, I unwrapped the gauze; although I had put on the fresh dressing only an hour before, a putrid smell immediately came into the room, and the once-white pad was stained dark brown. His eyes went wide.

"¡Ay! This is a terrible wound, young man! How did you ... this is not the work of any flame!"

Lisa and I looked at each other.

"How did this happen?" he demanded in a tone that brooked no nonsense.

"Well..." I took a deep breath. "I was burned by La Llorona."

"Tell me exactly how it happened," he demanded. When I had finished my story, he turned and stared at the religious relics, light shining from the window behind them so as to create a soft aura in the semi-darkened room. He was speaking very softly in Spanish, facing towards the altar, his words so faint that neither Lisa nor I could hear them.

"Is there anything you can do?" she asked when he was finished; there was fear in her voice and I, in turn, became frightened.

"I will do my best, Miss Lopez, but we are dealing with great forces. It is the spirit which must be the object of the cure."

He lit several more candles, two of

which he placed in front of statues of the Virgin Mary, then spoke for at least ten minutes in Spanish. Several times he made the sign of the cross over me, his left hand resting gently on my shoulder to indicate that I should lie still and say nothing. Then he reached into a cabinet below the raised bed and brought forth a jar of purplish-brown powder; pouring some into a clay bowl, he added water from a glass and mixed it with a spoon until it formed a paste.

"This is called *polvo de musgo*," he explained, positioning my hands palms-up on either side of my head as I lay on my back. "It may hurt."

I set my teeth and managed to stay silent while he spread the paste over the burn, even as the pain leapfrogged up my arm and stabbed into my brain over and over again. With my palm completely covered by a thick layer of the sticky mush, he turned again to the altar and spoke pleadingly in Spanish; Lisa squeezed my shoulder reassuringly. Making the sign of the cross over me one more time, he finally gave me permission to get up.

"How long should I keep this on my hand?"

"You may wash it off now. The restroom is directly through there and to your left."

As I followed his directions and went to wash my hand, I could hear Lisa asking him questions in Spanish; then their voices started to rise until they were arguing loudly, speaking

much too rapidly for me to get any meaning out of the words.

My palm seemed noticeably better when I rinsed it, the revolting smell much weaker and the blisters less inflamed. I waited a moment until the argument subsided, then went to the living room, where Lisa and Mr. Hernandez now stood staring at each other like two boxers between rounds. I showed him my hand, asking if he thought that now it would begin to heal.

"It is hard to say. Perhaps it will, but in cases like this.... It is very hard to say."

"I've heard that there is another person in Cucamonga, a woman, who may be able to help you," Lisa said.

"And I have been telling the young lady that when you deal with her you are dealing with evil, that you are making a pact with one of Satan's servants. She is called *La Bruja*, 'The Witch,' and it is a name she deserves to carry with her."

"But you told me yourself that you've worked with her!" Lisa fairly shouted at him. "If she's so evil, how do you explain that?"

"To expand his knowledge, a *curandero* must travel to many strange places and speak with many people. Wisdom is not only found in the righteous."

"Look, Mr. Hernandez," Lisa told him, out of patience, "I know almost every family in this neighborhood. If we go out that door, I won't have to

walk more than half a block before I knock on someone's door and they tell me where to find this woman."

"All right, all right. But remember that I told you not to go." He stomped out of the room, fuming.

"Are you sure this is a good idea?" I asked her. "I mean, a witch doesn't sound like...."

"Don't listen to him," she interrupted. "He was trying to shake us down for more money to find out where she lives."

A minute later he returned and announced very importantly that, against his better judgment, he had arranged for *La Bruja* to see us immediately.

We left on that note; Lisa shook hands with him, and I thought I saw a folded square of money pass between them. When we were in the car I asked her about it.

"That's considered the polite way to pay someone like him, even though I had to twist his arm to work the price down to fifteen bucks. How's your hand?"

"Better. Still hurts like hell, though."

She turned down another street, as two kids sitting by the corner waved to her excitedly and she waved back. "He wasn't really all that optimistic. That's why I was able to get his price down."

"I'll write you a check when we get to my place." I felt both guilty and flattered that she had so casually paid for me.

"No problem. You do know that

this other woman could be expensive, though."

"How bad?" I asked, wrapping a new bandage around my hand.

"Maybe fifty bucks, I don't know. Ask her ahead of time; she's probably used to seeing people who don't have much money."

"Is she really what you and I would call a witch?" I was still worried about what I was getting into.

"The kids made her sound very mysterious. They didn't know much more about her than that she'd helped people when the *curandero* couldn't."

La Bruja lived in a small house that was once yellow but was now weathered almost brown, only three blocks from the home of Mr. Hernandez. A low chain-link fence separated the front yard from the dirt sidewalk, but its purpose was one of definition rather than protection: the yard itself was a dustbowl, with only the bravest weeds growing inconspicuously in the corners.

We stepped up on the front porch and knocked on the door. It was answered by a tall, serious-looking young woman, perhaps 30 years old, with thick black hair that slipped past her shoulders all the way to her waist. She wore a white blouse and high-waisted black pants that made her long legs seem infinite; she looked more like a fashion model than a malevolent conjurer.

"¿Señorita Lopez?" she asked Lisa, smiling.

"*Sí. Este es Steve Sorteaux. El tiene una mano quemada.*" I held up my hand, since it was apparently the topic of discussion. After more conversation in Spanish, we were led into the neat, spare house; the floor was once-polished wood worn smooth by decades of use, and the furniture was hidden by throw-covers decorated in bright Indian patterns. The walls of the living room were bare except for a wooden crucifix and a large tapestry with an Aztec theme.

"Please, sit down." I was surprised to hear her speak English; her accent was heavy, but it had a soft, throaty tone that was pleasingly different.

"I'm sorry, I don't know your name," I started, speaking slowly.

She smiled, her high cheekbones bridged by straight white teeth. "Everyone calls me *La Bruja*, I know. I am Nahualla de Mictlante; you should call me Nahualla. (When she said it, the word sounded like Na-wii-yah.) Tell me how you burned your hand."

For the second time in an hour I told the whole story briefly. When I had finished, she surprised us both by laughing.

"It seems to me strange that you work so hard to discover what anyone in Cucamonga could now have told you. The life of La Llorona is not a secret, but you follow it like a ... a detective."

We found ourselves laughing, too. "I hate to ask you this," I said, "but I need to know how much you charge."

She nodded slowly. "I will make with you an agreement. You have proved to yourself that there is a Llorona, and you know that she is very dangerous. If you will promise not to put yourself in much danger by seeking her another time, I will help you and you will only give me five dollars. This is the money I must give to Mr. Hernandez for sending you to me."

I had discovered everything I had set out to discover, and then some. "That's fine with me."

"It had better be!" Lisa said, and I began to suspect her hand in this arrangement. They had talked very earnestly in Spanish when we entered, and the fix, it seemed, was in. "I'm ready to spend a nice quiet evening with you watching television or playing Monopoly or something safe like that."

Nahualla smiled. "Then we should see this hand get better so it can hold yours while you watch the television, true?" Lisa didn't answer, but it wasn't just my imagination that saw her smile at the thought.

I was ready to be led into another converted bedroom, but instead she took us to the kitchen at the rear of the house, asked Lisa to sit down at the wobbly table and had me stand by the faucet. Placing the rubber plug in the drain, she filled the dingy porcelain sink with cold water while gently unwrapping my hand. Her slender fingers had such grace and delicacy that the cloth came away from my skin without sticking, as it always had done so ex-

cruciatingly when I had performed the ritual.

"Mr. Hernandez told you many terrible things about me, true?" she asked casually, waiting for the sink to fill.

"Well, yes," I admitted.

"I am used to it," she said, sounding like it still bothered her very much. When the water was lapping at the tiles of the countertop, she reached in and adjusted the plug so some of it could escape, then fine-tuned the faucet so the level remained constant as it churned and frothed at the brim.

"After you have visited Mr. Hernandez I feel that this is going to seem very simple to you."

"I don't care how simple or complicated it is," I told her, "I just want my hand to stop hurting and start getting well."

"That is what you must keep thinking. My mother taught me to do this with a big bowl in the river when I was a little girl in our village in Mexico." She took a small clay planter from the windowsill above the sink, in which some short, dark-green plants were rooted. They looked like a cross between clover and moss, but beyond that I couldn't identify them except to note that when she picked a number of them there was a sweet, spicy odor that Lisa noticed halfway across the room.

The green sprigs were wrapped in a small dishcloth and tied with a string, then dropped in the mini-whirlpool in the sink, my hand following them into

the cold water. My palm stung a little at first, but then the coldness numbed it and the feeling was reasonably comfortable, certainly after the pain I had endured the past four days.

After about a minute, with Lisa staring at us from the table, she turned off the tap and let the water drain away from around my hand. As the skin became visible above the surface, still glistening wet, it was already clear there'd been a change.

"All right!" I exclaimed; Lisa stood up and came over to us. Attached to my right wrist was a hand that, clearly, had been burned, but which now had only pinkish blisters on white skin. Gone completely was the smell of pus, the rotting color that had been so frightening.

Lisa put her arm around Nahualla's shoulders. "That's fantastic! All the infection is gone!"

"Few people realize how cleansing water can be," the supposed witch said. "They call me *La Bruja* because they see the results I can make. But it is another secret that no one has tried to hide. I have no special powers. As my mother taught me, I just use the things I find around me to help the people."

She re-wrapped my hand in fresh gauze, again instructing me to change the dressing frequently and follow whatever directions the doctor had given.

When we drove home that night, we both felt, I think, that this whole affair was finally over — and that

another kind of affair was just beginning. For the first time, we went to her apartment, a comfortable new one-bedroom flat in one of those complexes with bright graphics painted on all the outside walls. We spent the evening playing Monopoly and watching TV, and she dutifully held my left hand around the cast in order that we might follow the plans we'd discussed with Nahualla to the letter. I think if I'd pushed it she'd have been happy to have me spend the night, but somewhere inside both of us there was the knowledge that nothing had to be hurried, that the relationship was in full control of itself and would mature on its own without any machinations on our parts as individuals.

When we got to the grad dorm a little after one in the morning — Lisa blaming me because she would be sleepy in class the next day — she was the one who leaned over confidently and kissed me. As we sat there, pinioned in each other's arms across the parking brake of her little car, I remember thinking I was the most satisfied man on Earth. I truly had found everything I was seeking.

VII

I thought about that moment the next evening — as I have so many times since — sitting in the putrid pool of stagnant air behind the trash bin in the church parking lot. Staring out at the wash. Waiting for La Llorona.

If only.... How many times in a

man's life does everything succeed or fail on nothing more than one "if only..."?

I thought about the promise I had made to Lisa, the promise I had made to Nahualla, the decision I had made for myself. And I thought about the picture.

The picture was what had changed it all. I had walked over to the camera shop that Friday afternoon, hoping for the crowning element in my thesis, the visual evidence of La Llorona's existence. When I saw it, I realized that I finally held the key. I finally understood it all.

Or I thought I did.

Sitting there, waiting for La Llorona, I thought about all these things. I was excited, convinced I'd finally put it all together, but there was guilt, too, over violating Lisa and Nahualla's trust. At least, I told myself, I wasn't *searching* for La Llorona, as I'd promised I wouldn't do; I was letting her come to me. It was a weak rationalization, but it was the only one I had.

To pass the time I took notes, writing down all my feelings, checking my logic over and over again in writing, sure that it *had* to be this way. I copied Lisa's name in a hundred different styles of printing, interweaving it with mine, aware that what I was doing could split us apart even as I symbolically tried to bind us together.

When the boredom got too great, after the sun went down, I would do

pushups or situps in my tiny sanctuary, perspiration seeping through my black shirt, staining it an even deeper shade of blackness with warm liquid.

It was sometime after midnight when she appeared, shuffling down 26th Street just as I had seen her the night I took the picture. I entered the sighting in my notes, took a deep breath to calm myself, stood up and walked towards her in full view.

She stopped moving when she saw me, still fifty yards away across the bridge. The face was lost in darkness beneath the shawl, but I could see in my mind the eyes, the tears, even the crumpled tissue, just for me. Her weak voice leaped the wash effortlessly: "*Otra vez, joven?*" I understood: "Again, young man?"

"*Otra vez,*" I called as gently as possible, stepping into the street. My knees were becoming liquid, panic screaming at them, telling them to turn and run. But my conscious mind was stronger. I kept walking.

She moved again, much faster this time, not walking, not running but coming closer, growing taller more terrible as she ate up the distance between us and converted it into her Self, a shrouded white figure now ten feet tall with a skull-face and flaming eyes rushing down on me, and suddenly I was falling backwards, gagging on the folds of cold, white cloth, drowning beneath the ice, slipping deeper....

Breathe in. Breathe out. Breathe in.

Breathe out. I made myself do it. I felt the pavement beneath me, decided where I was. When I stood up I didn't look for burns; I knew there would be none.

Standing a few feet in front of me on the bank of the wash was the same elderly woman who had refused my coins a few nights before. She smiled. "Very good." I tried to mask my surprise at her lightly accented English, failing miserably. "What else about this old ghost do you need to know? Did not your picture prove everything you came to learn?" She spoke casually, with the tone of a kindly grandmother.

I reached into my shirt pocket and brought out the picture for her to see, holding it up in the illumination of the streetlight. "Yes, that is what told me everything. Or almost everything." It showed the parking lot. The street, the bridge, the light pole and a short stretch of the wash were all faintly visible at the edge of the flashcube's range. It did not show an old woman, even though I knew that she had been standing directly in front of the camera when the image was recorded.

"Did you expect your camera to capture a ghost?"

"Not a ghost. You aren't a ghost at all." I spoke forcefully, afraid that if I stopped I'd lose my nerve. That would be all she'd need. "I tried to do it for you, but I just couldn't believe in a ghost, even when you were there, right in front of me; even when you burned

me. I couldn't figure it out. Once I saw the picture, once I saw proof that your body didn't reflect light, there was only one thing you *could* be: a projection."

She smiled skeptically. "And what is that?"

I made my voice stay curt, serious. "You are a projection, the creation of someone's mind sent here to be ... sensed, somehow, by mine. As I talk to you, as I see you, I am thinking that I am actually talking to someone else who is not here."

I was growing confident, bravado building into real relief. Tears once more began to come from her eyes. Too much, I thought; doesn't she realize I see through all that?

"It is true, I have tried very much not to hurt you. I have tried to frighten you in every way I know, but you always return."

"I had to find the truth."

"And this is what you would write in your book? That everyone may stand before the Llorona with no danger because she is like a reflection in the mirror, they see her but she is not there? You would write that her power is only in their minds?"

I nodded, "Yes." Inside, I was yelling: Yes! Yes! It's just as I thought! Everything she says, everything she does makes me more sure!

"And many people would read this book?" she was saying. "The things you say will be repeated many places, many times?"

"If they believe me."

"You are a very ... convincing young man. So then many people will stop to fear the Llorona, and she will not be able to punish the sinful." Her voice grew stronger and the old dark eyes met mine directly; through their windows lay a frightening chasm into which you could fall and never stop falling. I made myself concentrate on her words, breaking my eyes away from her possessive gaze.

"That is sad," the voice said, "for that is the mission of the Llorona, to strike down those who betray the commandments by which the people of the community must live, to make an example for everyone. (*Why does she keep it up? She should be fading away! I've got her dead to rights, she should just fade away!*) That is why I have let you live. I hoped to be able to ... to arrange your fear so you could not threaten what must be done." She drew herself up, no longer the hunched old woman, but a regal figure, an image of power. Fear tugged more insistently at my legs, trying to pull me away.

"I've never tried to harm you or anyone else," I said, looking down. "That's why I knew that even if I were wrong, even if you were a ghost or had some special powers, I'd be safe. You said you couldn't take my soul, because we both knew you had no reason to take it."

"It is true," she replied, her voice commanding, "I cannot take your

soul. I can only take your life."

The intensity of her words and their message snapped me back to my senses. Our eyes met once more, but they were no longer the empty eyes of La Llorona; the tall, majestic figure in the flowing white dress was now the woman they called *La Bruja*: Nahualla de Mictlante. I stood like a mannequin, unable to move from the shock of the transformation.

"I know," she said, "you thought it was one of the old women of the barrio, perhaps Mrs. Aguilar, who created what you call the projection of La Llorona, as I have created the ... picture of me that you see here."

"I..." No words could escape my throat. "I'm sorry."

"There is much sorrow in this for everyone. Because you are so close to the truth. I told you that I use the things I find around me to help the people. I have no special power that is mine. I can only take the things the people of the town believe and use them to change the way things are."

"So you purposefully killed the men who were selling drugs?"

"It is what the people wanted, what they believed they needed. In one way, it was I; in another way, it was all of us together. The United States is a land of many destinations, but there are few roads through the mountains to reach them for the people who live in places such as this. There are temptations all around to lead them down paths that are evil, that lead to wicked places

where they will be swallowed up by their own desires and lost." The visual and auditory images were perfect; it took all my conscious effort to remember that it wasn't Nahualla who was standing before me in the tiny halo of the streetlight. "To outsiders La Llorona is a curse upon our people. To the families who have lived here for generations, who have raised their children here and seen them raise their children's children, she is a blessing who defends us against a ... a world of many illusions."

Things were not going as I'd planned. There were too many loose ends, too many powers I hadn't guessed she had. Fear reached up from the pit of my stomach once more, and this time my mind accepted it willingly. "Well, I don't agree with killing people, but I'm an outsider, like you say, so I can't judge you." As I talked, I started backing towards the church grounds. "I won't use your name in my paper, and I'll talk about how La Llorona is a force for good in the community."

She shook her head. "It is too late for that. Only the Nahualli, such as I, may learn what you have learned and live. The Nahualli have been for all time the rivers through which the thoughts and fears of the people flow, until they reach the great ocean that is Mictlantecuhtli, the God of Death. It has been so in the temples of Teotihuacán, in the great halls of Tenochtitlán, in the tiny villages of Mexico as the Spaniards came and their

thoughts fell like the rains and joined the waters of Mictlantecuhtli. It is so now in the souls and minds of all people whose hearts hold Nahuatl blood."

I continued to back up. "That's why you took the name Nahuatl de Mictlante. You said you didn't try to hide your secrets." I was almost to the parking lot; she remained by the bridge, making no effort to follow me. Or, her image made no effort to follow me.

"Yes, as you cannot hide from me that you seek protection inside the church because you are afraid I have a power called ... telekinesis." The word came awkwardly from her mouth, but was torn still beating from my mind. "Did I not hold your coins?"

I reached the parking lot, still backing towards the church itself, a hand grenade of panic exploding inside me at the thought of what she'd just admitted. "But no one will ever believe me!" I called to her. "An outsider can't change the thoughts of the people who give you your power!"

"We survive because our laws survive. The Nahuatl grow, we change, we move but we never die. As a priestess I must protect the people not only against the evil of temptation, but from those who would destroy our defenses against that evil. You are a kind man, and as a woman I am sorry. But as a Nahuatl I have my duty to Mictlantecuhtli, and you must die."

Before I could say another word she started to fade away. Through her

image I could see faintly the bridge and the dirt maintenance road beside it, with a chain padlocked to two metal posts to keep out cars and trucks. For a moment I thought that I had won our battle of wills as she became more and more translucent.

But then the chain behind her quickly rose up in the air, snapping the locks at each end as if they were rubber bands holding it in place. In panic, I turned to run for the doors of the church, but I had taken only three or four strides before the chain slithered across the pavement to catch me by the ankles and bring me down with a crack as my cast hit the ground. Even as I struggled to regain my feet, the steel-clad snake was dragging me back towards the wash, leaving a trail of blood from my knees and elbows as I writhed and chafed against the pavement.

Her voice came to me faintly now. "I am sorry. It will be easier if you do not fight so." But I didn't want it to be easy. I knew she had to be straining herself, making her projection fade, pulling towards the limits of her power like a radio with a dying battery. I wanted to drain as much of it as I could, make her work to drag me every inch, in the hope I could still break free and get away.

It was no use. I kicked; my fingers clutched the ground until they, too, began to bleed; I screamed for help at the top of my lungs. The chain, pulled by the unseen hand of the Nahuatl's

mind, fired by an entire town of people tired of the meddling of an outsider, heaved me roughly down the bank of the wash, dropping me over the three-foot concrete wall like a sack of garbage. Still yelling as loudly as I could, I was bounced across the rocky floor of the dry riverbed until the chain reached the concrete pylon beneath the bridge. Even in the dim light beneath the roadway I could see one end of the metal Sorcerer's Apprentice fuse into the concrete to anchor there as if set in the original cement. The rest snaked tightly around me, lifting and circling my body again and again, then melded into the pylon on the other side, mounting me as a figurehead facing due north along the wash.

Again I heard Nahualla's voice, loud and clear once more. "Once the water I brought to you cleansed your hand; so let it cleanse you now even as it takes your life. Mictlantecuhtli will accept you as his child. You should have no fear, only pride."

I called out to her, pleading for help, for mercy, begging for my life, but she ignored me. I could hear her reciting some incantation in what sounded like an Indian language. I was gripped by the fear that the chain would start to contract around my chest and suffocate me, but it didn't move, and soon everything was silent. I was alone.

I was still alone five minutes later as bolts of thunder flashed across the mountainsides only a few miles to the

north, and I began to understand. I understood why Nahualla's voice had faded away, why she had chained me to the bridge, why she had said the water would cleanse me. Up in those mountains, where the peaks rode to their crest more than 10,000 feet above me, the storm she had commanded was dropping water in the sheer canyons. Even now it was cascading downwards, gaining speed, branches joining branches to form ever-larger torrents until it would be a deep fast-flowing river that would drown me where I stood. I could hear the roar as the water came for me, drowning my hoarse-voice cries, anxious to fulfill its mission.

The first wave was only about a foot high, but when it hit me I felt like both my ankles were being torn away by huge claws carved from ice. The frigid water drained my body's warmth from every pore it touched, and I started shivering so badly I could hardly yell, the strain and fear clutching at my throat until my voice shrank away to almost nothing.

I thought of Lisa, of how everything had been so perfect just the night before. So perfect....

The water rose slowly, so slowly as to be torture, letting me watch my life being washed away downstream by its spirit-robbing force. I wished for unconsciousness so I wouldn't feel it reach my face; all my life I'd had nightmares about drowning, of swimming desperately for the surface and never

reaching it. Perhaps I had my own psychic powers, had forseen my sacrifice in this barren channel.

Several times I thought I heard voices in the water's roar as it crashed into me and the bridge's foundation, but they would always melt away into the gurgles and pops of the liquid as it performed its dance of death in celebration of my passing.

I wondered if Lisa would be at my funeral, what she would say to my friends, my parents. How my parents would react to the death of their only son.

Then, once, the voices didn't go away. They were singing, and as they got closer I recognized the same private version of *My Darling Clementine* I'd heard the night before the accident: "*La Llorona, La Llorona, La Llorona, don't you cry....*"

"Help me!" I yelled, using all the voice I had left; it sounded pitifully weak. "Help! I'm trapped in the wash!"

In a moment three teen-aged faces peered over the bank, rubbing their eyes in disbelief.

"Hey, man, what are you doing down there?!" one called.

"Some guys from Onta chained me here!" I yelled back, invoking the name of the arch-rival barrio Lisa always spoke of. "Get me out quick or I'll drown!"

They talked excitedly to each other for a moment; then two of them ran off. "We're getting tools! Those guys live real close and they got tools to cut

them chains!" the remaining boy called down to me.

"Just call the sheriff! They can get me out!"

The boy bristled. "We don't need no sheriff to handle Onta or nobody else!" he yelled back. "We take care of things ourselves!"

"Just hurry!" I called, less confident of their abilities. The water was approaching my waist; already it would be very dangerous to wade across the ten-foot-wide channel separating me from the bank on which they stood.

I don't know how long it was until the other two kids returned, but it seemed like hours. They brought bolt-cutters and a length of rope which they proceeded to string across the ties to the metal pole that once held the snake-chain binding me. The other end of the rope was wrapped around the waist of the largest boy, a heavy, bearded kid who must have weighed 200 pounds and who held it securely. Another took a smaller length of rope and made a series of knots that produced a large loop which he slipped around his waist, and a smaller one through which the safety line was threaded. I watched all these preparations with terrible impatience as the water sledge-hammered up my stomach, making even breathing difficult.

The boy now inched his way into the freezing water, being careful to use the rope to keep from losing his footing. The newborn river had risen

so high that even with the safety line it took more than a little courage to cross the torrent with heavy bolt-cutters tucked under one arm. As he got closer I could see the tattoos on his forearms ripple with the effort of the muscles straining underneath, and his face showed the total concentration that was necessary to maintain his balance as he reached out and grabbed the chain.

"*Ahórale, ese*, those guys from Onta really did a job on you!" he shouted over the water's drone. "These chains are solid!"

"Just get me out of here!" I croaked.

"Hold onto me so I can get some leverage on these cutters! Damn, this water's cold!"

I grabbed him as best I could through the chains. Twice the vise-like blades, wet from the splashing water, slipped off the polished metal, and I began to worry if he would make it in time. If the water got much higher, even the rope linking him to the banks wouldn't guarantee a successful return to shore.

Finally, there were two sharp cracks and I felt the bonds around me loosen. I grabbed the rope with both hands to make sure I wouldn't be carried away in the current; with both of his friends pulling as hard as they could to keep it taut, we started to slowly make our way back to shore.

I remember how it seemed the water held a million tiny hands, each try-

ing to grasp me and pull me down, desperate to keep from failing in the mission Nahualla had given them. Every moment there was the chance that, with one hand still burned, the other wrist in a cast, I would lose my footing, slip under the rope and give the flood the victory it sought. But the boy in front of me set a slow and steady pace, setting each foot carefully before taking another step, and we ultimately crawled up the rocky bank and collapsed. I started to cry, all the pent-up fear and tension tumbling out of me, as my saviors said, "It's cool, man. You're okay now. It's cool."

Both the guy who had rescued me and I were shivering from the exertion and the cold water soaking our clothes. So the other two lifted us up and we all started walking down stream. "You can get some dry clothes at Vince's house. It's only a couple of blocks," said the heavy kid.

Vince was the one who had gone in the water. "You can borrow some of my stuff until your clothes dry," he told me. I realized for the first time that they'd all been thoroughly drunk when they first discovered me, and, though the cold water had sobered Vince up pretty well, the other two still walked in lines that were not exactly straight. At least they weren't asking for more details about how a stranger came to be left in their neighborhood by a rival barrio; I had no idea what to say if they asked for the whole story.

We followed the wash across 25th

Street down to 24th, then turned west, still leaving muddy footprints in the dirt sidewalk as we went. Music drifted to us from the bars a couple of blocks away. Suddenly, I stopped in my tracks.

"I can't go this way," I announced definitively. A hundred yards down the street was the metal fence that guarded Nahualla's home, and to go by there, I knew, would be to underestimate the same opponent twice.

"Hey, man, there ain't nobody from Onta down here! *Nobody* comes down this street if we don't want him to!" Vince pulled at my arm, the others reassuring me of my safety.

I was about to make another excuse when the distant music was disembowelled by a woman's high, arcing scream that grated painfully on the night air. The four of us cringed, eyes searching all around us for its source. Before the sound had even faded away, the boys took off in the direction of the bars, dragging me along protectively, calling out, "They're here! They're tryin' to jump somebody!"

"Which house did it come from?" Vince yelled.

He didn't have to ask again. Flames were exploding out the window of the old yellow-brown cottage, thick dark smoke ballooning up to obscure the streetlight. It was Nahualla's house.

Running as fast as they could while almost carrying me, they reached the front yard and joined the crowd that was gathering as people heard the cries

of "Fire!" The entire front of the house was in flames, the fire spreading with unnatural speed. Fresh from one rescue and anxious for another, the boys went around to the back with me in tow, searching for signs of life. A large brown dog with a fearsome jaw full of teeth was tethered to a tree, where it barked at us furiously; whether it was threatening us or urging us on in the search for its mistress I don't know.

A light was on in the kitchen, and Vince wielded the bolt-cutters like a baseball bat, crushing the flimsy plywood of the back door in one stroke. He dashed into the smoky room, and rather than see him face the power of La Llorona alone, I followed, fear calling me a fool for not hanging back and letting him take his chances.

I needn't have been afraid. Nahualla lay face-up, spread-eagled across the rickety kitchen table. Her mouth and eyes were stretched wide open in a frantic, never-ending scream, her black hair cascading in a waterfall to the floor. Blood soaked her once-white blouse, flowing in a thousand tiny rivulets into a great pool on the linoleum from the gaping hole in her chest where her heart had been torn out.

Vince started to gag and we ran together back out into the yard. The dog was howling with the sirens as the fire trucks roared up the street to reach the house; it sounded like a dirge, and I started to cry again. This time no one was able to make me stop.

VIII

In the papers it was reported as a perverted gang killing, the work of members of a rival group from Onta. Two pages away was the story of how I had fallen into the wash while taking pictures and was saved when three courageous residents of the neighborhood pulled me out. At least they got some of the credit they deserved.

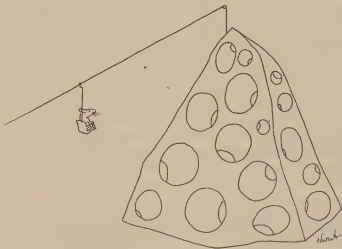
When I told the story of what really happened to Lisa, she was furious, screaming that she never wanted to see me again. She feels I'm responsible for Nahualla's death and that my meddling has done nothing but hurt the people of the community. I can't really disagree with her.

I've had a few weeks to think about it now, to realize I can't even have the satisfaction of having discovered the truth about La Llorona. Perhaps Nahualla de Mictlante really was a Na-

hualli priestess who served Mictlantecuhтли, the Aztec God of Death. But what if she *wasn't* La Llorona? What was to keep the *real* psychic from projecting Nahualla's image just as the image of La Llorona herself was projected, then killing her ceremonially as if the God of Death had taken the priestess instead of the victim when the sacrifice was denied?

I just don't know.

I wonder, as I write this, if whoever set out to teach me about the power of La Llorona didn't succeed with a vengeance even such fearsome judges could not understand. Many nights now, in the darkness, I can hear a voice crying sadly, echoing emotions crushed into jagged shards by forces too great for it to comprehend. It is a familiar voice to me, now; I have heard it many times. It is my own.



In which Dr. Asimov introduces a two-centimetre-tall demon with limited powers but enough on the ball to help a humiliated lover out for revenge....

One Night of Song

BY
ISAAC ASIMOV



As it happens, I have a friend who hints, sometimes, that he can call up spirits from the vasty deep.

— Or at least one spirit; a tiny one, with strictly limited powers. He talks about it sometimes but only after he has reached his fourth Scotch-and-soda. It's a delicate point of equilibrium — three, and he knows nothing about spirits (the supernatural kind); five, and he falls asleep.

I thought he had reached the right level that evening. So I said, "Do you remember that spirit of yours, George?"

"Eh?" said George, looking at his drink as though he wondered why that should require remembering.

"Not your drink," I said. "The little spirit about two centimeters high, whom you once told me you had managed to call up from some other plane of existence. The one with the paranat-

tural powers."

"Ah," said George, "Azazel. Not his name, of course. Couldn't pronounce his real name, I suppose, but that's what I call him. I remember him."

"Do you use him much?"

"No. Dangerous. It's too dangerous. There's always the temptation to play with power. I'm careful myself; deuced careful. As you know, I have a high standard of ethics, that's why I felt called upon to help a friend once. The damage *that* did. Dreadful! Doesn't bear thinking of."

"What happened?"

"I suppose I ought to get it off my chest," said George thoughtfully. "It tends to fester —"

I was a good deal younger then [said George] and in those days women make up an important part of one's

life. It seems silly now, looking back on it, but I distinctly remember thinking, back in those days, that it made much difference which.

Actually, you reach in the grab-bag, and whichever comes out, it's much the same, but in those days —

I had a friend, Mortenson — Andrew Mortenson. I don't think you know him. I haven't seen much of him myself in recent years.

The point is he was sappy about a woman, a particular woman. She was an angel, he said. He couldn't live without her. She was the only one in the Universe, and without her the world was crumbled bacon bits dipped in axle grease. You know the way lovers talk.

The trouble was she threw him over finally and apparently did so in a particularly cruel manner and without regard for his self-esteem. She had humiliated him thoroughly, taking up with another right in front of him, snapping her fingers under his nostrils and laughing heartlessly at his tears.

I don't mean that literally. I'm just trying to give the impression he gave me. He sat here drinking with me, here in this very room. My heart bled for him and I said, "I'm sorry, Mortenson, but you mustn't take on so. When you stop to think of it clearly, she's only a woman. If you look out in the street, there's lots of them passing by."

He said, bitterly, "I intend a womanless existence from now on, old man — except for my wife, of course,

whom every now and then I can't avoid. It's just that I'd like to do something in return to this woman."

"To your wife?" I said.

"No, no, why should I like to do something to my wife? I'm talking about doing something for this woman who threw me over so heartlessly."

"Like what?"

"Damned if I know," said he.

"Maybe I can help," I said, for my heart was still bleeding. "I can make use of a spirit with quite extraordinary powers. A small spirit, of course," I held my finger and thumb up less than an inch apart so that he was sure to get the idea, "who can only do so much."

I told him about Azazel and, of course, he believed me. I've often noticed that I carry conviction when I tell a tale. Now when you tell a story, old man, the air of disbelief that descends upon the room is thick enough to cut with a chain saw, but it's not that way with me. There's nothing like a reputation for probity and an air of honest directness.

His eyes glittered as I told him. He said, "Could he arrange to give her something that I would ask for?"

"If it's presentable, old man. I hope you have nothing in your mind like making her smell bad or having a toad drop out of her mouth when she talks."

"Of course not," he said, revolted. "What do you take me for? She gave me two happy years, on and off, and I want to make an adequate return. You

say your spirit has only limited power?"

"He's a small thing," I said, holding up my thumb and forefinger again.

"Could he give her a perfect voice for a time, anyway. At least for one performance."

"I'll ask him." Mortenson's suggestion sounded the gentlemanly thing to do. His ex-mistress sang cantatas at the local church, if that's the proper term. In those days I had quite an ear for music and would frequently go to these things (taking care to dodge the collection box, of course). I rather enjoyed hearing her sing and the audience seemed to absorb it politely enough. I thought at the time that her morals didn't quite suit the surroundings, but Mortenson said they made allowances for sopranos.

So I consulted Azazel. He was quite willing to help; none of this nonsense, you know, of demanding my soul in exchange. I remember I once asked Azazel if he wanted my soul, and he didn't even know what it was. He asked me what I meant, and it turned out I didn't know what it was, either. It's just that he's such a little fellow in his own Universe that it gives him a feeling of great success to be able to throw his weight around in our Universe. He *likes* to help out.

He said he could manage three hours, and Mortenson said that would be perfect when I gave him the news. We picked a night when she was going to be singing Bach or Handel or one of

those old piano-bangers, and was going to have a long and impressive solo.

Mortenson went to the church that night and, of course, I went too. I felt responsible for what was going to happen and I thought I had better oversee the situation.

Mortenson said, gloomily, "I attended the rehearsals. She was just singing the same way she always did; you know, as though she had a tail and someone was stepping on it."

That wasn't the way he used to describe her voice. The music of the spheres, he said on a number of occasions, and it was all uphill from there. Of course, though, he had been thrown over, which does warp a man's judgment.

I fixed him with a censorious eye. "That's no way to talk of a woman you're trying to bestow a great gift upon."

"That's just it. I want her voice to be perfect. Really *perfect*. And I now see — now that the mists of love have cleared from my eyes — that she has a long way to go. Do you think your spirit can handle it?"

"The change isn't timed to start till 8:15 p.m." A stab of suspicion went through me. "You hadn't been hoping to use up the perfection on the rehearsal and then disappoint the audience?"

"You have it all wrong," he said.

They got started a little early, and when she got up in her white dress to sing, it was 8:14 by my old pocket watch which is never off by more than

two seconds. She wasn't one of your peewee sopranos; she was built on a generous scale, leaving lots of room for the kind of resonance you need when you reach for that high note and drown out the orchestra. Whenever she drew in a few gallons of breath with which to manipulate it all, I could see what Mortenson saw in her, allowing for several layers of textile material.

She started at her usual level, and then, at 8:15 precisely, it was as though another voice had been added. I saw her give a little jump as though she didn't believe what she heard, and one hand, which was held to her diaphragm, seemed to vibrate.

Her voice soared. It was as though she had become an organ in perfect pitch. Each note was perfect, a note invented freshly at that moment, beside which all other notes of the same pitch and quality were imperfect copies.

Each note hit squarely with just the proper vibrato, if that's the word, swelling or diminishing with enormous power and control.

And she got better with each note. The organist wasn't looking at the music, he was looking at her, and — I can't swear to it — but I think he stopped playing. If he were playing, I wouldn't have heard him anyway. There was no way in which you could hear *anything* while she was singing. Anything else but her.

The look of surprise had vanished from her face, and there was a look of

exaltation there instead. She had put down the music she had been holding; she didn't need it. Her voice was singing by itself and she didn't need to control or direct it. The conductor was rigid and everyone else in the chorus seemed dumfounded.

The solo ended at last, and the chorus sounded in what was a whisper, as though they were all ashamed of their voices and distressed to turn them loose in the same church on the same night.

For the rest of the program it was all her. When she sang, it was all that was heard even if every other voice was sounding. When she didn't sing, it was as though we were sitting in the dark, and we couldn't bear the absence of light.

And when it was over — well, you don't applaud in church, but they did then. Everyone in that church stood up as though they had been yanked to their feet by a single marionette-string, and they applauded and applauded, and it was clear they would applaud all night unless she sang again.

She did sing again; her voice alone, with the organ whispering hesitantly in the background; with the spotlight on her; with no one else in the chorus visible.

Effortless. You have no idea how effortless it was. I wrenched my ears away from the sound to try to watch for her breathing, to catch her taking in breath, to wonder how long a note could be held at full volume with only

one pair of lungs to supply the air.

But it had to end and it was over. Even the applause was over. It was only then that I became aware that, next to me, Mortenson had been sitting with his eyes glittering, with his whole being absorbed in her singing. It was only then that I began to gather what had happened.

I am, after all, as straight as a Euclidean line and have no deviousness in me. So I couldn't be expected to see what he was after. You, on the other hand, who are so crooked, you can run up a spiral staircase without making any turns, can see at a glance what he was after.

She had sung perfectly — but she would never sing perfectly again.

It was as though she were blind from birth, and for just three hours could see — see all there was to see, all the colors and shapes and wonders that surround us all and that we pay no attention to because we're so used to it. Suppose you could see it all in its full glory for just three hours — and then

be blind again!

You could stand your blindness if you knew nothing else. But to know something else briefly and then return to blindness? No one could stand that.

That woman has never sung again, of course. But that's only part of it. The real tragedy was to us, to the members of the audience.

We had perfect music for three hours, *perfect* music. Do you think we could ever again bear to listen to anything less than that?

I've been as good as tone-deaf ever since. Recently, I went to one of those rock-festivals that are so popular these days, just to test myself out. You won't believe me, but I couldn't make out one tune. It was all noise to me.

My only consolation is that Mortenson, who listened most eagerly and with the most concentration, is worse off than anyone in that audience. He wears earplugs at all times. He can't stand *any* sound above a whisper.

Serves him right!



Greg Benford, author of the award-winning novel, TIMESCAPE, offers a short and surprising tale of time travel to the final days of Hitler's Germany.

Vahalla

BY
GREGORY BENFORD

Adolf Hitler worked the action of the pistol. He clacked a round into the chamber. He stared at it.

Eva Braun numbly picked up the cyanide capsule from the table in front of them. She opened her mouth slightly and stared glassily at the small pill.

They sat on a rich red couch that stood out from the bleak gray concrete of the bunker walls. Hitler's face was puffy and waxen.

"Bite down hard," he said in a flat, rough way that was barely like the famous harsh, powerful voice of the ancient films.

He raised the muzzle of the Luger to his temple. Eva sighed softly and opened her mouth again. So there were to be no last, loving words.

That was when I chose to materialize.

Hitler caught the ultraviolet flicker as I came into being before them. "Ich

sagt —" he said harshly and my pickups translated, "I said we were to be left for ten minutes —" and then he saw me.

I was gratified at his shock. I looked exactly like him. I wore the same clothes. All details were correct, even down to the pale, sickly face and the trembling hand, a reminder of the assassination attempt by his own army officers. He pressed it against his left side. Echoing him, I did the same. I stepped over a broken wine bottle, my boots crunching on the glass, and said, "Fuehrer! I have come to you across a thousand years to this, your supreme moment."

It was perhaps a bit florid, but our analysts had calculated that it would strike the correct note. There had been much high-flown, desperate rhetoric in these final days in Berlin. In his state of depression and nervous collapse, Hitler

could respond only to the most exaggerated of statements. He had ignored Albert Speer when the man came to make his farewell some days ago. Speer was an exact, cool type. Such a manner would not work for my purposes.

"I ... you look...." He waved the Luger vaguely.

I moved swiftly and took the pistol. The primary thing to avoid was any sound which would cause the staff officers outside to open the heavy door. If they came in and found us, history would be altered and our entire scheme would fail. I would be flung forward into the future. Hitler would still kill himself, most probably, but the perturbation of the time flow would prevent us from ever returning to this moment.

"Yes, I can explain that," I murmured. "Madame?" I leaned over Eva and gently lowered the hand which held the cyanide. She would not disturb events if she was treated formally; that much was clear from the personality profile we had reconstructed from historical data. She glanced at Hitler and began wringing the hand which had held the capsule. I could see the psychotheorists had been wrong about her. She was no canny power behind the throne.

Hitler said, "If this is a plan of Goebbels —"

"Fuehrer, this is no futile attempt —"

"I will *not* leave Berlin. I will not

allow a, a dummy to take my place." He raised a trembling finger and shouted. "I will *not* run and sneak and hide from —"

"Of course not. The world will respect what you do here."

"This cheap joke! You dressed up! — I will not have it!"

He was raving. His eyes bulged with a sudden fury, more like the old films. I had to cut him off before the staff outside heard. It would mean a change in the scenario we had worked out, but that could not be helped.

"Immortality, Fuehrer! That is what I offer. I have come to you from the future!"

He paused. I rushed ahead. "Think of the times ahead, Fuehrer. There will be glorious days again — I know. I have come from there. More than a thousand years from now, you will be the most famous of all men from this time."

He faltered and the rage in him burned away. Exhaustion returned to the ruined face. "I ... a thousand...."

I had lied only slightly about his fame. There was a physicist whose name had greater weight in our time, but it would not be wise to mention it. It was an odd coincidence that they both lived in the same land at the same time.

Still, my own code of honor demanded that I make only minor excursions from the truth. I would have to be careful.

"Your world goals, Fuehrer —

would you like to know how they fared?"

"I ... goals...." He seemed in a daze. "Jewry...."

"Yes! To cleanse Europe of Jewry! And the destiny of Germany, sir?"

"Deutschland ... it is finished ... their own ... cowards ... traitors ... spies...."

"You fought to make Germany the dominant power in Europe, yes? I am able to tell you, Fuehrer, that fifty years after this dark day, it was done!"

"Deutschland ... destroyed ... Berlin...."

"Jewry never returned to the body of Europe, Fuehrer! They never returned to your homeland in such numbers again, ever." This was true, but not for the reasons he would imagine. "And Germany shall rise from its ashes. Its economy shall crush the Bolsheviks and the American capitalists alike."

He brightened. He looked at me and then at Eva. "Is this ... can you be ... Eva...."

"That is how the future of Europe will be. You have done your great task." I smiled and clicked my boot heels together.

He would not catch the irony in the gesture, or in the word "great" — he was too embedded in his own fantasies. Yet I had quite strictly told the truth. He had broken down the whole structure of the world he was born into and left behind a Germany and a Europe deeply divided. These events were great in the sense of their size and im-

plications. He would, of course, interpret the word in a different sense. That was what I expected, but it did not alter the fact that I had told the truth. To achieve a noble end one must keep to the truth.

Eva Braun said in a strained, thin voice, "Adolf, it is as you said it would be. Your faith...."

"Yes! I knew it! I held to the dream of Deutschland when all those around me failed, and this —"

"Fuehrer, there is little time. I come from a society you cannot envision, but in my time you are understood better than now." This, too, was true. We could analyze the past with the tools of exact sociometric theory. "We are devoted to justice. We look backward to your time and we see errors, great unfairness. My people have sent me to you, to correct injustice."

He frowned, blinked. As we had suspected, he was near collapse. Probably he was unable to understand much of what I said. My subtle phrasings surely eluded him.

"For you to die here by your own hand, Fuehrer, after all that you have done — such an outcome is, to my society, unthinkable." I smiled again.

Hitler's gaze shifted. For a moment I thought he was going to faint and all our hopes would be dashed. But, no — he was staring at the room behind me. It was the sitting room of his personal suite, crowded with curious wooden furniture. The dregs of parties — pieces of discarded clothing, bottles, half-

finished plates of animal-flesh food — were scattered through it. But Hitler was staring at the blue aura behind me. I saw suddenly that it framed me in a halo of fire. Hitler's eyes widened as this registered. He took a step forward. "Valkyrie!" he cried.

I calculated swiftly. Valkyrie. My translating subsystem told me that this meant, literally, the chooser of the slain. They were maidens who conducted the souls of heroes slain in battle to Valhalla. In some deranged way Hitler thought the future I was describing was a Nordic heaven.

I was tempted to let him think so. But then I saw that to do so would be unjust to him. He had to make as informed a choice as was possible. Honor demanded that.

"No, Fuehrer," I said quickly. "You are not destined for Valhalla yet. There is no need to die. I —"

"I am the greatest warrior the world has ever seen!" He stiffened. The smoldering fury kindled again. "I destroyed the Poles, the simpering French, the —"

"Of course, in our time we know this," I said in soothing tones. "Have no doubts. Though I come from more than a millennium in the future, this war remains the largest the world has ever seen." I did not add that the explosions to come in a few months would end forever the possibility of a rational large-scale war, and this fact more than any other made the Second World War so important an event.

"Adolf," Eva said, "this man is not a god. He says he is from the —"

"I heard! I saw a vision once ... on the Rhine ... the blue...."

He moved unsteadily to touch the ultraviolet shimmer behind me. I stepped aside, but the glow followed me. The portal was still centered on me, and Hitler could not reach it. He grasped at it a few times and then vaguely let his arms drop.

"She is correct, sir," I said. "My society has sent me back to this moment to rescue you. Your life should not end here. I will take you into the far future, Fuehrer. Into a more just world, where —"

His head snapped up. Abruptly he was the man he had once been, vibrant. "Very well! I see a glowing blue Valhalla and you tell me it is the future. These are names! Only names! I saw it there on the Rhine and now I see it for what it truly is —" He raised a finger to make his point. The finger no longer trembled. "— and the dreams, my dreams, are not finished. I knew it! Goebbels told me to never submit, and I have not, I have held on, and now you come for me. It is as I —"

There was a knock at the door.

Hitler blinked and then smiled. He turned toward the door. "They ... outside ... if they can see this it will put backbone into my generals...I will...."

This was crucial. I put out a restraining hand. "No, it is not possible."

"What? If they see you, see —"

"Fuehrer, history — my history —"

depends on your staff never seeing you again. In their eyes you will die in here."

"I ... do not...."

"It is the natural order of things. I have come to save you for the future. There is nothing more you can do for this Germany, this land which did not deserve you."

I spoke passionately, for I believed these words. They had their effect. Hitler nodded wearily and said raggedly, "Deutschland ... did not stand by me ... deserves this...."

Eva Braun said clearly, "That is why you are dressed so."

I nodded. She was clever.

"I rescued Mussolini; it is only right that some higher power should in turn save me." He paused, lost in his dull thoughts. I remembered that Mussolini had been captured by partisans only a few days before, and shot, and then hung upside-down in a marketplace with his mistress, for all the crowd to see. That memory was, we thought, the reason why Hitler and Eva Braun were taking this way out.

"I am the architect of National Socialism and without me it will die and...." He was rambling now. I stepped backward, knocking aside a broken chair, and checked the parameter matrices around the blue corona of the portal. It detached from me and filled with motes of orange and yellow.

"I built it ... there was no one else who saw the vision...." He was right, of course. The other great movement

of the era had Marx and Lenin and Stalin, but National Socialism was the work of a single figure.

A pounding on the door. In another instant they might open it.

"Fuehrer! Go now."

"I...." He turned slowly to the couch. "Eva...."

She did not rise. She knew.

I had to seize the moment, to deflect his thoughts to his destiny. "There is a greater end waiting you. Take it now!"

I laid a hand on his shoulder and urged him forward. I did not push. I merely helped.

Eva Braun did not rise. As I helped the old man forward, I saw her pick up the capsule from the table.

I felt the fields clutch at him, pull him away from me. There.

Quickly I sat on the couch. The Luger! — there it was, on the table.

He had been holding it in his right hand. I held it the way he had and checked the action. It was ready.

Eva Braun was holding the cyanide, looking at me.

I said to her, "You must understand. There are reasons why he must go alone. It is...." I had difficulty looking into her eyes. "It is for the best. For you."

She said nothing. I knew I should force her but that would be wrong. And I could not pull the trigger for myself until she had taken the poison. The texts were clear on that point — she had died of poison.

"You see, we are a society devoted to justice. We have perfected it in our time to a degree you cannot imagine. It is the consuming passion of our age. We wish to correct the events of the past in a way that does not alter time itself. A figure such as he —"

I gestured to the blue corona. Hitler was partway through it now, moving in slow motion like a swimmer as the tangled timelines warped around him, sucking him forward.

I disliked the words even as they fell from my mouth, but somehow they had their effect. Eva Braun murmured, "I believe I understand."

Simply, eloquently, she put the capsule in her mouth and bit down. I think she smiled at the last instant.

A sound from the door. I raised the muzzle to my temple. They would find the two bodies as history said.

I looked up at Hitler swimming in the fluxlines and he rotated back toward me. He had seen ahead of him,

into the room we had prepared for him. He turned toward me and on his face I saw the surprise and the terror and saw the yawning scream begin. I would join him in an instant, when the bullet crashed into my brain and the life-essence which this ugly vat-grown body carried, the life-essence which was truly me, would return, drawn in through the closing portal and forward into the future where Hitler would be trapped.

But for a moment I savored the image of Hitler turning, spinning in the blue aura, his mouth stretched wide, turning away from the sight of the devices and machines and animals ahead of him. Turning fruitlessly away from the things which would do justice at last and could bring bubbling up in him an infinite pain, infinitely prolonged.

I pulled the trigger, eager to slip through the portal, eager to hear Hitler's scream.



The aliens had science beyond anything Earth knew, and they were willing to trade, but who would figure that a farmer in coastal Maine would have anything to offer....

The Bung-Hole Caper

BY

THOMAS A. EASTON

The aliens came to Earth the same spring that Cyrus Holmes found the old barrel. It was buried under a stack of old lumber in a dark corner of the barn, and it would have stayed buried if Cyrus hadn't been looking for his grandfather's tool chest. Grandpa had been a cooper all his life, and when he was gone, the tools had been stored away. They included a cooper's adze, which Cyrus thought might be just the thing for roughing out a new plow handle.

He found the adze. Once sharpened, it worked as well as he had hoped. He also found the barrel, and that was in rather worse shape. It had been drying for half a century, forgotten in the shadows, and its staves now fitted as badly as fence pickets. But a month or two in the pond would fix that, he told Allie, his wife. Then he could replace the hoops and have a decent vessel to

harden his cider in.

All through that summer, Cyrus tended the barrel. He soaked the wood in pond water, watching the wood swell and tighten. He replaced the hoops with cobblings from his workbench. He stood the thing in the yard, filled it from the hose, and watched as the last leaks slowed and stopped. Finally, it was as tight as it would ever be, and the apples in his small orchard weren't quite ready.

In the meantime, there were the aliens. Cyrus knew all about them. He didn't have a tractor or a chain saw or an electric milker. He worked his fields with a yoke of oxen, cut his firewood with an axe, and milked his dozen cows by hand. Still, he was up-to-date enough. He had a car, for getting to church on a Sunday and so Allie could drive to her job in town. He had a radio or two. He even had a teevee set,

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and he never missed the seven-thirty news.

He knew all about the aliens. He'd seen pictures of them, all smothered in pastel-patterned coal-scuttle helmets, like something out of a movie about the Great War. He'd heard they were refugees from some foreign disaster or war, and he knew they were asking for a place to settle in the ocean shallows, promising not to interfere with navigation or fishing — they farmed their food on land — and offering to trade. They had science beyond anything Earth knew, they had technology, and they had a price list. The space for a small colony, a little place to call their own, for instance, was worth the plans for a space drive. Help in settling-in was worth a map to worlds that men could live on. Other things were worth money, credits that could be exchanged for travel tickets, for lesser goods, even for alien encyclopedias, suitably translated. Earth was drooling.

Cyrus thought it all interesting enough, but he was a farmer, a raw-boned, weathered outcropping of Maine's coastal hills. The aliens scarcely touched his life, and they never would, any more than the rest of modern life did. Too, he'd never seen an alien. Not many people had, for though they traveled plenty, they did it in closed black limousines, chauffeured by UN flunkies.

Cyrus — he hated being called "Cy" so much that anyone who dared be so familiar might get day-old eggs or

half-soured milk — Cyrus put the aliens on a par with Florida hurricanes and California floods and Dee-troit strikes. They were all interesting. They all made the news. And he thought about them only when they crossed the flickering screen of his teevee set.

But the day came, it did. His apples ripened, and he gathered up the falls and picked the rest. He set a basket of the best down cellar for winter eating, helped Allie put up two dozen jars of applesauce, and filled the trailer with the bags and boxes that remained. Then he visited the cider mill.

The mill was Bob Witham's. An ancient rig of flapping belts and groaning gears, powered by a gasoline engine, it was nearly as decrepit as its toothless, flatulent owner. But it made good cider.

Cyrus binned his apples and watched the endless belt haul them up the chute to the grinder. As old Bob paddled the pulp into the burlapped flats for the press, Cyrus said, "Got a barrel now." He had to roar to be heard above the machinery.

Bob glanced up from his work. "Good for you."

"Ayuh. Old one. Found it out in the barn."

"Hope it's tight." Bob held up a hand to examine a gob of apple pulp sticking to a thumb. He licked it off. "Good apples this year, Cyrus."

"Should hope so. M'nured the be-jeezus out of 'em. Soaked the barrel, too."

"Oughta do it. Stand back now." Bob threw a switch, and the grinder overhead groaned into silence. He flipped the last fold of burlap into place, laid a flat on top, and leaned into the pile of neatly wrapped squares of pulp. They rolled into the press on their dolly and jolted to a stop. He hauled on the lever that lowered the immense plate of the press into position. He flipped the lever that fed power to the belt that drove the press's screw. The screw turned. The plate mashed down. Juice spurted from the flats, collected in the gutters, and was pumped to the holding tank on the wall above their heads.

"Where's that cup?" asked Cyrus. Bob turned to point at the wall. There hung, just as it did every fall, a battered dipper. Once it had been enameled grey and blue. Now it was mostly rust, but Cyrus didn't mind. He took it off its nail and held it to catch the dripping cider. He drank deeply, and then he offered it to Bob. "It's good."

"Ayuh. Barrel'll do it more good'n them plastic jugs of yours, too."

"Hope so." The juice was sweet and tart, yet not too tart. Once hardened and settled, it would have a decent kick to it.

When the last drop of juice had left the press, Cyrus fetched his jugs from the car. They were the five-gallon inflatable things the hardware store sold to campers. Cyrus had found them good for cider, for maple sap at sugaring-off time, even for hauling water in

dry spells. Now he puffed them open and held them under the nose from the holding tank. They filled slowly, since the hose was none too big, but he was in no great hurry. The cows would need milking when he got home, but they could wait for half an hour. Sixty gallons of cider was well worth a little patience.

He didn't unload the trailer till after supper. Between milking the cows in the pasture and the other chores, he had no time, and even then he didn't have enough. The barrel was in the barn, resting on its side, the bung-hole neatly plugged, its filling port on top and open. He ranged his jugs beside it. Then he selected one and took it into the house. "Fresh cider," he said to Allie. "Want a glass?" She did. They drank. They filled a pitcher for the fridge and put the rest in smaller jugs for the freezer. It would keep there, and they would have it for their grandchildren, for nieces and nephews, for themselves whenever they didn't care for hard cider. "I'll put the rest in the barrel tomorrow," he told his wife. "That's soon enough."

They refilled their glasses then, took them into their small living room, and turned on the news. And there were the aliens again, big as life. It seemed the French had sent them a case of wine. They liked it, asked for more, and paid, generously. "Our guests," said the teevee announcer, "have said they will pay for whatever they want.

And we want their money, for only with it can we buy the wonders they have to sell. The trick has been finding things they want. We are very different creatures, with different tastes and different needs, and they are far ahead of us in technology. Too many of the things we make, they can make better, and they have less desire for our handicrafts than we have for Indian pots and blankets. After all, we aren't related." The announcer smiled, showing well-kept teeth.

Cyrus grunted. Allie said, "Maybe they would like your cider."

Cyrus grunted again. "Doubt it. 'Tain't wine, is it?" She agreed. Cider was a country thing that rarely appealed even to most humans, living as they did in cities. Most folks preferred wine and beer. Why should the super-civilized aliens be any different?

First thing next morning, as soon as the milking was done, Cyrus headed for the barn. He wanted to get his cider into his barrel, get it working with a touch of baker's yeast, get it started toward his favorite brew. But when he entered the barn, the barrel was not as he had left it. The bung-hole was no longer plugged, and the barrel itself had rolled a bit.

He scratched his head. Had someone come last night to steal some cider? No. All the jugs were there, just as full as he had left them. He swore.

When the barrel twitched, he swore

again. When he saw a movement behind the unplugged bung-hole, he did it once more. Damn! His cider barrel, that he was counting on to give him better drink, was occupied. A rat? A mouse? It was late in the year for snakes, and birds would never enter such a place.

There was a sound, like a watery voice. The movement repeated, and a ropy thing, a tentacle, emerged from the bung-hole. With difficulty, he realized what he had. An alien. Of all things. What was it doing here? Where was its chauffeur? Where was its shell? He traded his puzzlement for a growing anger. What right did it have to take over his barrel, to deny him proper cider?

The tentacle wriggled. "Please, excuse," the voice burbled, echoing within the barrel. "Shell, too-small. Abandoned, vehicle. Seek, other."

Cyrus hunkered down. He peered into the bung-hole, trying to make out a detail or two. It was too dark in there, but he glimpsed what might have been an eye, a damp hide, a lobsterish mouth. By all accounts, the things were harmless enough. He didn't fear, and his anger was fading, already giving way to fascination.

The tentacle writhed. It tapped the end of the barrel above the bung-hole. It tapped twice, once to either side. "Make," the voice burbled again. "Holes. Eyes." It tapped below, along the barrel's curving flank. "Legs."

There was a pause while Cyrus

thought it over. The creature didn't speak the language well, but it could get its wishes across well enough. Cyrus knew what it wanted, all right. But he knew, too, that boring all those holes would ruin the barrel. He'd be stuck with plastic cider for another year, and maybe longer. Finally, the voice spoke again. "Will, pay," it said.

That was another matter. "All right," said Cyrus. "Though I want to know why you chose my barrel." He stood and headed for his workbench. He found his electric drill and the hole saw. He added over his shoulder, "How big you want the holes?"

When the voice said, "This," he turned to watch the tentacle sketch a two-inch circle. Fine, he thought. The saw could handle that. He plugged in the extension cord and fetched his equipment back to the barrel. "Back off, now," he said. The tentacle withdrew, and he pulled the trigger. The saw bit and whined, once, twice, and the alien had eye holes. As he sat back on his heels, the eyes appeared. They were on stalks, and they were extended a good six inches out the holes. "Thank," the alien said. "See, now." The voice still burbled, but it echoed less. The new holes made a difference.

"Now," said Cyrus. The barrel wasn't really ruined yet. He could always fit a new top to it. But now ... "Where do you want those leg holes?"

Once more the tentacle emerged. It lengthened, more than he would have guessed possible, and it pointed. The

saw whined again, six times, and the job was done. Or was it? Cyrus thought a moment and said, "You want more room around that arm of yours?" When the tentacle quickly sketched an oblong around the bung-hole, he obliged.

He rose, put his tools away, and returned. The head of his barrel now reminded him of nothing more than a Halloween pumpkin, all eyes and mouth, though no pumpkin ever had stalked eyes and a mouthful of wormy tentacles. No pumpkin had legs either, shiny and lobsterish, emerging from holes in its bottom. And no pumpkins walked, with a lurching, rocking gait, sideways across the barn floor. It struck him then, that the aliens resembled hermit crabs, wearing borrowed shells and moving into larger ones as they grew. He wondered if a real hermit crab might try a pumpkin.

He watched as the alien exercised its limbs. It crawled, it ran, it even capered as it grew used to its new shell, but it remained clumsy. A barrel just wasn't built to walk. Finally, it settled again, facing Cyrus, and burbled, "Thank."

Cyrus almost grinned. He prided himself on rarely going into a flap, no matter what the crisis. And he had a crisis here, for sure. An alien, away from its people, free of its human guides and chauffeurs. It would have to go back, of course. It would probably want to, unless it preferred a holiday among the natives. In the mean-

time, well.... "Mind if I call you Hermit?"

There was no answer. He added, "It's time to talk, you know. Why my barrel?"

The tentacles withdrew. In a moment they returned to scatter a handful of plastic strips on the floor before the man. The alien money. One tentacle retained a strip and held it up. "Pay. New, shell. Food?"

"Soon," said Cyrus. "But first, why?" Damn, he thought. It's got me doing it too. Though it's not hard. We do talk that way here, a bit.

"Found, first." The alien's burble was somehow plaintive. "Hungry." Cyrus said nothing. After a moment, the alien went on. "Grow, we. Shells, change, always. Small, natural. Bigger, smarter, plastic. Change, must. Too-weak, not. Too-soft."

Cyrus stared intently, thinking, beginning to see.... He was interrupted by a gasp. He turned, and there was Allie, a hand to her mouth, an apron around her waist. "I wanted the eggs," she said. "What's that?"

He told her. She scooped beside him, staring too. "They grow all their lives," he said. "Move into bigger shells as they grow. It says they get smarter too. I guess the brain must get bigger as they grow."

She nodded. Her grey hair bobbed. Her thin lips pursed. She smelled of the kitchen and soap. Her thigh was soft against his haunch, and he remembered.... The past, their past, was far from

dead, but though he still loved her, she wasn't the girl he had married, the girl who had left him for college and then returned for a farmer's life. She said, murmuring, "I suppose it must have been learning how to build their own shells that let them get smart enough for civilization, then."

"Skin," the alien burred. "Wood. Metal. Plastic. Food?"

"What would you like?" asked Allie.

"Egg? Cheese? Potato, mash?"

"Right away." She rose to her feet, as graceful as ever, and headed toward the back of the barn and the door to the hen house. In a minute she was back, an egg in her hand. She laid it down before the barrel. A tentacle unfolded it and hauled it within. There was a crunch and a sound of sucking. "Thank."

"They aren't very big today, are they?" said Allie. She left again. While she was gone, Cyrus peered through the widened bung-hole. Despite the holes, it was still dark in there, and he had to lean close to make out the broken egg, cradled in a nest of tentacles beneath a writhing mass of mouthparts. He leaned too close, in fact, for when the alien was done, the discarded shell bounced off his brow. He rocked back on his haunches with a muttered curse. "No manners," he said. "None at all."

"Whatever do you mean?" asked Allie. She was back, standing behind him, her apron sagging with the weight

of eight more eggs. "Maybe you shouldn't have been prying. I imagine it likes its privacy as much as we do."

"Then it should have stood at home."

"Enough of that, Cyrus!" She scooched beside the barrel and laid her eggs down on the floor. She held one out toward the bung-hole. "Would you like another?"

"Thank." A tentacle plucked the egg from her grasp. There was another crunching, sucking sound. She added, "It's a stranger, Cyrus. Away from home, and it probably doesn't know how it's going to get back. We should be nice to it."

"I suppose we should, Allie." They had always been as hospitable as they knew how, with friends and strangers alike. Every winter saw at least one stranded motorist warming himself before their stove and dining at their table, even passing the night in their guest-room bed. But never before had they hosted a stranger as strange as this one. "But I am curious."

"I know. I don't think anyone's seen them naked."

The alien had obviously been listening. "No," it burbled, discarding the second eggshell. "Fear. Eat, be. Call? Phone?"

"You want us to call your friends? At the UN?"

"Yes. Please. Thank."

As they stood, another egg disappeared into the bung-hole. "I'll just leave them all," said Allie. "The poor

thing's probably hungry."

"Enough, now. Take."

"All right." Allie gathered up the remaining eggs, and they turned to leave, thinking the alien would stay put. But as Cyrus was holding the door to the kitchen for his wife, they heard a scrabbling behind them. They looked, and there was the barrel, lurching along on six shiny legs, stalked eyes waving as they took in the yard, the car, the oxen behind their rail fence.

"We haven't had a dog for years," said Cyrus. "Wish we could keep it."

"Cyrus!"

The word got out, of course. By the time the limousine arrived, the yard was choked with neighbors, townsfolk, and local reporters. There was even a wire-service helicopter in the pasture. Their alien was the center of attention, and it was loving it. It burbled happily away, posing for pictures, answering questions, and making comments. At one point, its gist seemed to be that its new shell reminded it acutely of a precious antique it had had to leave at home. "Hurry," it burbled sadly. "Danger. Fear. Leave, all. Now, new. Bigger!"

When the car pulled in, honking aside the crowd, the alien turned to watch, raising itself to the tips of its legs. It was silent as the driver, a young black man uniformed in powder blue, jumped out, saying, "What's been happening?" It remained silent as three of

its fellows emerged from the back seat. They wore the coal-scuttle shells everyone knew from the teevee, and they were small, no larger than a bushel basket. When they saw the barrel, they sank on their legs, just as if they were bowing. They didn't speak, though it seemed natural to think they would have come armed with more than one choice phrase for their runaway.

The barrel lurched toward its smaller fellows. They flinched, retreating toward the car. "Up!" it burred. "Home. Now!"

The others scurried. "Master!" they chorused. Their voices piped liquidly, and Cyrus thought their shells must have very different acoustics from his barrel. Their attitude puzzled him, too, until Allie jogged his elbow with her own and said, "It's so much bigger. That must be it."

"They think it's smarter?"

She nodded. She turned toward one of the reporters and told him what they had learned. "If size and intelligence go together, then the bigger ones must be the leaders."

The reporter, a fiftyish man with a bulbous nose and white hair, answered in a whiskey voice. "Then you must have the boss-bug of them all here. I've never seen a bigger one."

Cyrus said, "It's just the barrel." He noticed the patch on the reporter's sleeve. The symbol was the same as the one on the helicopter. "Though I suppose it gives it plenty of room to grow."

They turned their attention back to the aliens as the newcomers scrambled nimbly into the limousine. The barrel followed, just managing to squeeze through the door. It was a tight fit, and Cyrus was glad his barrel hadn't been any bigger. Or was he? He was sorry to see the alien go. He'd been counting on that barrel for his cider, and, besides, he rather liked the alien. It was such a peculiar little bugger.

The fuss died down soon enough. There was better local news, such as the flying saucers seen near the nuclear power plant in Wiscasset, and the aliens were drawing more attention with their request for a piece of the Florida Keys for their colony. The ocean was shallow enough there, they said; the islands would give them enough land for their needs, and the climate was much like that they had left. The locals, of course, wouldn't hear of it, but the rest of the world didn't think the spot a bad idea at all. At least, so said the teevee.

But the story didn't end there. The limousine was back before Thanksgiving, bearing a silk-suited diplomat and an alien whose wooden barrel was now smoothed and polished and covered with the pastel patterns that denoted rank or, perhaps, identity among its kind. It looked more like a dressed-up pumpkin than ever.

The diplomat introduced himself as Vince Barger, the Second Assistant Under-Secretary for Alien Relations.

"A new department, you understand," he added with a smile that kept his teeth carefully covered. "We try to mediate between K-ssniskit's people and our own."

"Snickit?" asked Cyrus.

"K-ssniskit. Didn't she tell you her name before?"

Cyrus shook his head, wrinkling his nose at a strong whiff of Barger's cologne. "Can't say she did. Though she didn't seem to like what I called her much. Thought she was sorta like a hermit crab."

"So he called her Hermit," put in Allie.

All three watched the alien as she moved around the yard, stalked eyes peering into barn, pasture, and house, renewing her brief acquaintance with the place. She must have grown used to the weight of the barrel, for she no longer lurched. She must also, thought Cyrus, have grown a little.

Barger chuckled smoothly. "I can see why. But you probably irritated her. They're very sociable creatures, really."

He stopped talking when the alien scuttled closer. She stopped at Cyrus' feet and cocked her eyes up at his lanky figure. "Greet," she burbled.

"Greet, yourself." Cyrus squatted to be nearer her level. "What're you after now?"

"Cyrus!" said Allie. She turned to the alien. "Don't you mind him, K-ssnickit," she said. "We are glad to see you, and if we can do anything to

help, we will." She bent to lay a hand on the rim of the barrel just above the eyes. She looked as if she were petting it.

"Greet," the alien repeated. "Shells, like." A tentacle stretched to stroke the barrel's flank. "More. Make?"

"I suppose I could," said Cyrus. "Grandpa's coopering tools are still in the barn, and he taught me a little when I was a boy."

"Thin. Light. Polish, too. Sizes, many. Two, thousand," K-ssniskit burbled.

Cyrus whistled. That was a lot of barrels. "Take time," he said. "What'll you pay?"

Barger held out a piece of paper. "Here's the order," he said. "Fifteen hundred dollars apiece, as long as you meet the specifications. We'll pay you, and they'll pay us."

Cyrus whistled again. He took the paper, unfolded it against its crisp resistance, and read. "Ayuh." He turned to look at Allie. She showed nothing but approval in her face. And they could surely use the money. "I suppose I might," he said. "But why me?"

"She insisted."

And that was that. Or almost that. Cyrus took the order, though at first he felt a little as he guessed a Navajo must feel, selling pots and blankets to jet-borne tourists. But he soon realized that it wasn't *his* heritage he was selling. He was more like a Hong Kong Chinaman making colonial trivets for Williamsburg shops.

Not that he minded, except for one thing. He was fast growing rich, he was honing long-forgotten skills, he was indulging a love for different

woods and finishes, but he never seemed to have the time to make a barrel for himself. He still had to harden his cider in those damned plastic jugs.



Neptune Rising

Up through the blue-green furrow,
as sturdy as spikes
of new grass,
the three tines poke.
Then comes the long shaft,
and around the haft,
a hand.
The fingers are pale green,
the color of seafoam,
and the webbings between them
colorless as air.
Green veins
run rivulets
down the wrist
where, rapid as a minnow,
the pulse darts.
Close your eyes, landsman.
There is none
save seafolk
who can look and live
at Neptune rising.

—JANE YOLEN

Films

BAIRD SEARLES



Drawing by Gahan Wilson

Films and Television

TWILIGHT TO DARK

Meaning no disrespect, I've always felt that one's fondness for *The Twilight Zone* is directly proportionate to one's youth when one first saw it. Those who go all goo-goo eyed and misty at it were almost always at an impressionable age when they viewed it initially; for most of them it was an introduction to science fiction and supernatural fantasy, and I can understand feeling about it as I feel about my tattered, pulpy *Planet Stories* and *Weird Tales*.

What I'm trying to break gently is that I have little regard for the series, but respect those who do. By the time it came along, I had a lot of s/f and fantasy under my belt, and I found most of the episodes obvious and predictable in the extreme, to the point where I could almost always call the usual gimmick ending about halfway through the show, which didn't exactly make for suspenseful viewing.

I bring this up because I had a sharp sense of *deja vu* recently when a TV series called *Darkroom* premiered. The continuing popularity of *The Twilight Zone* in this age of imitation has obviously inspired some production hot-shot to come up with the idea of a contemporary series as close to TTZ as possible. Alas, they have succeeded, and I suspect that even the most loyal fan of the older show will blench at this one.

To begin with, we have the actor

James Coburn acting as "host." Coburn's voice timbre is close to that of Rod Serling's, and while he's not entirely aping Serling's famous lockjaw delivery, there's a suggestion of it. But it's one thing to have a person introducing a show that you know has also conceived, produced, and, more often than not, written it, and another to have an actor mouthing words about a teleplay he might well not even have seen — it lacks impact somehow. And what inane words they are, too; at one point, on mentioning Bela Lugosi, Coburn gave us the enthralling news that Lugosi had been buried in his black cape and then conjectured that he must have really thought that he *was* a vampire. That's really sub-monster-magazine level material.

As for the stories themselves, the two programs I've seen follow the pattern of a longer playlet followed by a shorter, and are eclectic *re* material. The first piece was s/f, from a story by Carter Scholz, a young writer already of some reputation in the field. It had to do with the electronic reproduction of an individual on television, so accurately and realistically that the person became unnecessary; the simulacrum did and said whatever it was programmed to. The story was that of a newsman duplicated in this way, he himself being put in *durance vile*, presumably for the rest of his life, by the naughty network. (Has anyone seen Tom Snyder in public lately?)

What I found most interesting here

was that the basic idea, computer duplication, is also the gimmick of Coburn's latest movie, *Looker*. Duplication is indeed the key word.

The second story on that show was the old one about the crystal set that picked up broadcasts from the past.

The major piece on the second show was by Robert Bloch from a story by Bloch, and *deja vu* really set in.

In this one, a girl is drawn to a young man just moved in down the road, but from various clues begins to suspect him of being a vampire. Being a Nancy Drew type, she does some investigating, including breaking and entering his house while he's out, and all the clues turn out to be red herrings. At this point, the person with whom I watch television, who hadn't been paying much attention anyhow, said, "So he isn't a vampire?" "No," I said, facetiously and off the top of my head, "he's a werewolf."

Well, then there's the obligatory meeting between the two in the dead of night at the deserted boat house, and she confesses her silly suspicions, and he is understanding, and the full moon is seen through the window at which he is standing, and need I go on? Noisy screams as the camera pulls away from the boat house to fade...

I really feel something's wrong when the most outrageously silly thing one can think of turns out to be an accurate forecast of the ending.

The second playlet this time was

about dismemberment. It was OK if you're into dismemberment. I'm not, really.

All in all, I think *Darkroom* lacks about four of *Twilight Zone's* six dimensions. Maybe five.

Speaking of originality and its lack, there was a two-part TV movie called *Goliath Awaits*. In it we have the premise of several hundred people trapped in a sunken ocean liner for forty years. Now there's a brilliant s/f novel by James White, *The Watch Below*, that deals with this idea (with many less people, however); it is one of those books so originally conceived and neatly executed, a unique concept handled so well that until now no one has ventured to try anything like it.

In the case of *Goliath*, it must be conceded that the basic idea was used very differently: a different medium, of course; a different scale (the multitudinous survivors had set up an entire

subsurface society); even a quite different method of obtaining breathable air.

And then there was the plot, lots of it, including a megalomaniac leader of the sunken community, antisocial types that lurked toward the front of the ship and were therefore called "the bow people," and the complications of discovery by modern divers and potential rescue.

Despite its general debt to White's novel, it was an attempt to do something different for television. As usual, it's too bad it wasn't better done; it suffered from primitive dialogue, an unimaginative production, and some of the worst acting I have ever seen (particularly Frank Gorshin's scenery-chewing performance as the leader's villainous henchman). Rod Serling could have done it better in 1959 in a half hour.

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Station Gehenna was a terraforming facility, a lonely, monotonous base on a forbidding planet. It had just experienced a mysterious death, and the psychiatric investigator was looking for answers inside the station and out....

Station Gehenna

BY

ANDREW WEINER

The captain, a morose individual in his middle years with whom I had exchanged hardly a dozen words in the month-long run out to Gehenna, accompanied me to the launch bay to give me the formal send-off appropriate to a person of my rank.

"This is it," he said. "This is as far as we go."

His tone was neither regretful nor apologetic. It betrayed, if anything, a definite eagerness to be done with me, to deposit me as quickly as possible like the excess baggage he so clearly perceived me to be.

He made a tentative, oddly jerky motion with his right hand, as though reaching out to shake the gross metallic paw of my atmosphere suit, then thought better of it and instead began to tug at the hem of his jacket, as if this was what he had intended all along.

His awkwardness signaled to me a

nervousness at once quite understandable and utterly misplaced. The captain believed that he had something to fear from me. I was, after all, a special psychiatric investigative officer for the Morale Bureau of our mutual employer, R.G. Spitz Interplanetary Development. And the poor mental health of his crew could hardly have escaped my attention. But I had no brief to report on the captain and his crew. The company, in any case, has long been prepared to grant a certain leeway in the behavior of space-grade personnel, in some respects a very special breed of person.

I tried to put the man at his ease, affecting a smile.

"Well, then," I said, "be seeing you in three months."

But the captain had already dismissed me from his field of vision. He was staring, gloomily, down through

the viewing port to the dreadful face of the planet below. I followed his gaze for a moment, then quickly looked away. I sealed my faceplate and clumped over to the descent vehicle, popularly known to spacefarers as the "pod." Indeed, no novice to spacefaring myself, I too could not help but think of it as a pod, even though I had always resented the tendency to project such needless anthropomorphisms upon the machinery of our own device.

A crewman closed the hatch over my head, plunging me into a darkness relieved only by the faint flicker of dials bearing messages that could not possibly concern me. The vehicle was fully automated, launched by the ship and guided down by the signal of the receiving station below. This sequence would either take place without fail, or else the vehicle would crash and I would die. In neither case could I affect the outcome.

A short-run vehicle, the pod was hardly designed for creature comfort. Crouched down inside there, I could not help but feel like some sardine in a can. Or, I thought, perhaps a child in the womb?

Irritated with myself, I deliberately turned my thoughts towards the situation I would be facing at Station Gehenna. It was a difficult one, no doubt about it, and one likely to challenge my abilities to the fullest. But it would not, I thought, finally prove impenetrable, once attacked with efficiency

and laser-like rationality: the two qualities I most valued in myself, and upon which I had built my so-far spectacularly successful career.

On this score I was wrong. But of course I did not know that as the falling began. The falling in that darkened tin can into the truly appalling murk below. The falling to Gehenna.

Motion of the pod ceased, with the customary slight jolt. I operated the hatch control and pulled myself up, out and down on to the concrete floor of the receiving bay. Over my head the roof began to slide back into place. All around me swirled the noxious atmosphere of Gehenna, sticky brown murk of water vapor and ambient hydrocarbons that quickly began to attach itself to the faceplate of my atmosphere suit. I activated the wiper mechanism, took bearings on the exit lock, and began to shuffle in that direction.

There was a shudder as the pumps started up their work of expelling the murk back into the world outside the station. Work which, in another fifteen years, according to my briefings, would become unnecessary. By then the air outside the station walls would approximate earth-normal, and colonists could swarm in to mine the rich mineral wealth of this planet. By then this station would have completed its program, which was nothing less than the complete transformation of the Gehennan biosphere.

Station Gehenna was a terraform-

ing facility, the nerve center of twenty such facilities spread out across the face of the planet. It was also the only inhabited site on the entire planet, sheltering the personnel who monitored the progress of the effort and serviced, where necessary, the automated substations.

The transformation of Gehenna was so far proceeding according to plan. There was, however, at least an element of doubt as to whether that plan could be completed. It was this doubt I had come here to resolve. In a sense, then, the whole future of this planet, not to mention the ongoing profitability of the company in terms of the recouping of its considerable capital investment here, hung upon my own shoulders. It was a burden I accepted easily enough.

The light over the exit door flashed green, indicating I could enter. I stepped through into a smaller chamber, closing the door behind me. Jets of steaming cleansers flushed my suit clean. Another light flickered on, and I was able to step through into the station proper, raising my faceplate as I went, nerving myself for the masquerade to come.

They were waiting for me, all of them, the entire station crew, the full population of the planet. All five of them. Previously there had been six, and now once again there would be a full complement. Their curiosity about

the newcomer was entirely understandable.

A big, hefty-looking man recognizable to me from my briefings as Station Commander and Chief Techperson Franz Muller, stepped forward to greet me.

"Recreation Officer Lewin," he said. "Welcome to Station Gehenna."

The masquerade had begun.

"Pleased to be here," I said.

"That's good," Muller said ponderously, his speech nearly as ponderous as his bearing. "It's always good to have a positive outlook."

A curious sort of remark. But I knew well enough that people tend to speak in such a stilted manner in tense and unfamiliar situations.

With Muller's help, I climbed out of my bulky atmosphere suit. He then shook my hand.

"Franz Muller," he said. "And this is our medical officer Greta Vichevski. My wife."

He indicated a tall blonde woman, like Muller in her early forties. Married, I recalled, for fourteen years, three contracts, a long time by anyone's standards. And a very strict contract it was, specifying complete monogamy. No children, of course. One does not raise children in places like Station Gehenna. Apart from anything else, the company would hardly tolerate it. And Muller and Vichevski had been working in places not unlike this one for a long time.

Vichevski smiled, a warm enough

smile. A likable-looking person, I thought, although one could not jump to conclusions.

"Techperson Norman Remus and Programmer Charlotte McKinley."

Another bonded couple. Remus, a thin, nervous-looking fellow in his early thirties, nodded rather curtly. McKinley, a very young-looking woman, from appearances hardly in her twenties, was small and dark like her partner. She engaged me in what seemed to be unnecessarily prolonged eye contact, which I finally broke by looking away. Only then did she smile.

Marital problems, I speculated, synthesizing my intuitive feel for the situation with my prior analysis of their personality profiles. A five-year contract for these two, signed just before their tour of duty here had commenced two years before. No joint-ownership of property, no children, no specifications for sexual mores, a minimum deal all around.

"Chief Science Officer and Assistant Station Commander Valerie Theron."

Theron, a darkly attractive woman in her midthirties, nodded almost imperceptibly, her face quite immobile.

"Welcome aboard," she said, rather oddly I thought.

The tension in the room, already tangible, seemed to heighten. This was, of course, the widow of Arthur Duggan, the station's late recreation officer, deceased these past three months. After the unfortunate death of

her husband, Theron had been offered a cancelation of her tour of duty by the company, with a full year's salary in recompense. She had declined, explaining that she was suffering no great grief and was perfectly capable of continuing her duties. Her marriage to Duggan had been primarily one of convenience. Given the company's longstanding preference for bonded sexual units in frontier assignments, they had paired off in order to earn the astonishingly high salaries available in this line of work. Five years out here, with nothing to spend that money on, and she could devote herself to her personal research interests. And this, she had informed the company, remained her intention.

A cold-blooded sort, then, but apparently she was still functioning reliably. Even then, the company would almost certainly have pulled her out and replaced her and Duggan with a suitably compatible couple, but for the circumstances surrounding Duggan's death. Given those circumstances, however, the company had decided to let things be, at least for the duration of my investigation.

The station crew, of course, had been led to believe that I was Duggan's permanent replacement as their recreation officer, booked up for the last three years of their tour of duty. A stranger, arriving alone and partnerless. They could not help but anticipate certain problems regarding sexual outlets. Would I attempt to bond with

Theron, and if so would she accept my advances? Or would I try to find sustenance with one of the other wives, or perhaps one of the husbands? It was a potentially explosive situation, and I had observed as much to my superiors. But as they had pointed out, the arrangement was strictly temporary. I, of course, planned nothing along those lines. I could not involve myself at that level; it was essential that I retain my objectivity. But I could hardly communicate that to the station crew.

I tried, therefore, to relieve some of the tension.

"Well, then," I said, as heartily as possible, "just let me get settled in and I'll see what I can do in the way of fun and games."

"Fun and games," said McKinley, "is exactly what we need."

My quarters were small and cramped, less than half the size of those assigned to bonded couples. Soon after unpacking my gear, I made my way to the recroom to inventory Duggan's equipment. It would be tedious maintaining this pose, but I could see the necessity, had indeed suggested the idea myself. To make a full and proper investigation here I would have to remain incognito, living and working among my unsuspecting subjects.

Arthur Duggan, I quickly realized, had not been an especially inventive recreation officer. Nor, towards the end of his life, had he been especially conscientious. His activity log, a rather

uninspiring record of bridge games, table-tennis tournaments and mathematical games-playing, petered out almost into nothing in the last six months before his death.

I recalled his suicide note — or, at least, what was believed to be a suicide note, a scrap of paper found in his quarters. "*The dreams are intolerable*," he had written. "*I can no longer bear the dreams*." Just that, only that. Little enough to go on.

The table-tennis table was thick with dust. I was cleaning it as Muller came in.

"I'm glad you're here," he said. "We could all use some diversion."

"From what?" I asked.

He gestured vaguely, as if to take in the room, the station, the planet, the entire universe.

"The monotony," he said. "The monotony gets to you after a while. Particularly here. Greta and I have served on such stations before, but this may be the worst. Here, you cannot even go outside for a walk. Even in a suit, you will see nothing. Just the murk, the filth."

"My predecessor," I said. "Arthur Duggan. I know of course what happened to him. But what do you think made him do it? This monotony you speak of?"

Muller shrugged. "One can handle monotony. One does not kill oneself simply for that reason. Duggan went out for a walk without his atmosphere suit, and that's the whole story."

"I don't mean to pry," I said. "I was merely curious. The company told me little about the matter."

"There's nothing to pry into, nothing to tell. He got very depressed, and one day he went out for a walk. As to his reasons, I really couldn't say. Things like that happen and it's terribly unfortunate, but it's all past history now and we have to make the best of it."

"Of course," I said. "I agree completely. We'll just have to see what we can do to make you people happier, won't we?"

Muller grimaced slightly, withdrew.

I had studied many tapes of recreational experts in the process of social facilitation and was doing my best to mimic them. For a person of my own temperament and disposition, this was not the easiest thing in the world. But I could only try. As Muller had observed, it was human nature to make the best of things. That was pretty much the key to the human condition. Though I myself might not have expressed it so succinctly.

At the evening meal that night the station crew were extremely subdued. Muller and Remus had a desultory and inconclusive exchange about an apparent malfunction developing at substation four. Muller reminded Theron that a progress report on atmospheric changes was now overdue,

although he did not seem overly concerned about the matter. Sloppy and inadequate procedural work from this group had been one of the signals of trouble noted by the Morale Bureau even before the death of Duggan, although in itself it was not completely untypical of the course of events in such isolated locations.

"I'm working up a new recreational program," I announced, over dessert. "I would much appreciate some input."

"Input?" echoed Remus.

"Suggestions," I said. "I'm open to them."

"Then I would suggest," Remus said, "that you simply leave us alone. Leave us to our own devices."

"Recreation," I said, "is extremely important to the human organism. Vitality so, in conditions of deprivation if any of you should decide in the negative. I do appreciate that periods of individualized leisure activity can often be a constructive and appropriate choice. But even then I believe I can serve as a useful resource in planning such personal activity programs. Despite recent unpleasantness we must, as the old Earth saying goes, keep on smiling."

"Smile away," Remus said. "No one is going to stop you."

"After all," McKinley added, "you can always play with yourself."

"Come on, now," Muller interjected. "Let us make Mr. Lewin welcome among us. He is here to make our lives easier."

"The name is Jacob," I said. "Jake."

Actually, I had never liked the name Jake but saw the need to encourage conviviality.

"Yes," said Vichevski, as though taking Muller's cue, "I myself have missed our bridge contests. Haven't you, Norman?"

"I don't like bridge," Remus said, his expression now openly hostile. "I hate the game. I find it boring and pointless. I was glad when...." He stopped, swallowed. "I was glad when we stopped playing and gave up our ridiculous charade of congeniality."

"Tensions," I said, "often develop in small groups like this one, thrown on top of one another in conditions of severe isolation. That's perfectly normal. The company recognizes this. That is precisely why the company provides a recreation officer, an otherwise nonfunctional team member, at quite considerable expense."

"Fuck the company," Remus said.

There was a momentary silence.

"Norman...." Muller began.

"You heard me," Remus said.

"Fuck the company. The company knows nothing. The company is run by a bunch of fucking idiots. What does the company know? Look at what happened to Duggan. Maybe they should have provided a recreation officer for the recreation officer."

I stole a glance at Theron, but she seemed unmoved by this reference to her late husband. She sipped her coffee calmly.

"The company is not infallible," Muller said. "The company is not God. No one suggests that it is. The Company makes mistakes, and perhaps it made one in assigning Arthur Duggan here...."

"Perhaps it made one," Remus said, "in assigning *anyone* here."

"Nevertheless," Muller continued, implacably, "the principle of structured recreational activity is quite correct and amply demonstrated. We have three more years here together. We have to live with one another."

"We don't have to talk," Remus said. "That's one thing we don't have to do. It isn't in the contract."

He got up and stalked away from the table.

Muller turned to me. "I must apologize..." he began.

"No, no," I said. "Not at all. If anything, I should apologize, for rushing into things like that. I should have developed a better feeling for the situation."

"You will," McKinley said, "soon enough."

I lay in my bed in my unfamiliar quarters, unable to sleep.

No question about it, there was a wrongness here. I could feel it in these people, in the way they acted and reacted and talked. And this, of course, was exactly what the bureau had expected. "One bad apple," my supervisor had said, "and the whole barrel goes. Whatever a barrel is or was."

Duggan's death had affected them more than they would admit. Or else it was the consequence of some still-on-going underlying situation. It was up to me to find out. And find out I would.

Gehenna was my first assignment to a terraforming facility. Otherwise, there was nothing very new about the situation. From the mines of Betelguese One to the fisheries of E. Eridani to the wheatfields of Greenfield, wherever the company sent me, I would go to diagnose the causes of disorder and prop up sinking morale.

For where there was poor morale, there was also the probability of inefficiency. This lesson the company had learned well through long experience in the field of human-resources planning. And inefficiency was something the company was not prepared to tolerate.

And beyond that, beyond the matter of efficiency, there was the problem of scandal. R.G. Spitz could not afford the slightest hint of it. The company was unpopular enough already for its aggressive expansionary policies. Labor syndicates decried its record on safety procedures, its export of jobs. Environmentalists bemoaned its destruction of minor and insignificant alien life-forms in the colonization process. The militant political faction known as the Contractionists opposed all extraterrestrial development activity by the company and its competitors, claiming Earth as the only acceptable temple of the human spirit.

The suicide of a minor company employee was potentially scandalous enough. A complete collapse of morale, a failure to cope with the arduous conditions of colonization, might set an absolutely ruinous precedent.

"Gehenna," I was told in the course of my briefings, "is what you might call a problem spot. Even at the beginning, when the construction team went in to build the stations. We had a lot of tension, wildcat strikes, fights. A bad situation all around."

There was something depressing and upsetting about Gehenna, more so even than the usual bleak and empty frontier world. I did not believe, however, that it was just the sheer inhospitality of the place. Company teams, after all, had operated efficiently in even worse circumstances.

Perhaps the balance of the team here was all wrong, the original readings of compatibility invalidated by some unknown error-factor. Perhaps the fault lay with Muller. He appeared to be a good enough station commander, had functioned well in that capacity in previous postings. But a good station commander did not lose his recreation officer. A good station commander did not allow a situation to run out of control.

Thoughts still racing, I rose from my bed and dressed to wander the corridors of Station Gehenna. Robot drones passed me by, washing and waxing the floors, keeping the station meticulously clean. I wondered, brief-

ly, if this was really such a good idea. Possibly these people might develop a greater sense of social cohesiveness if they were forced to take greater responsibility for their own hygiene.

It was a good point. I made a mental note to record it in my log. The company, in its all-encompassing benevolence, might be doing too much for them. Look, after all, at how contemptuously and ungratefully they had rejected my own offer of services as a recreation officer.

In the outdoor corridor, beside the door marked Airlock Two, I paused to peer through an observation portal looking out on the surface of the planet. It was not yet dark out there — this planet turned on its orbit in a period of 34 hours, while the station obeyed Ter-ran biocycles — but neither was it particularly light. Through the thick plexi-glass window, the storm continued to rage, as if to batter down the station walls.

Involuntarily, I shuddered. Gehenna had been well-named, if perhaps too aptly so. One did not expect such whimsicality on the part of the company's exploration teams. No doubt the place would need to be renamed when it entered the colonization phase. Then again, perhaps the colonists would miss the reference altogether.

It was the station itself that was causing this turbulence outside. All around me hummed the machinery whose program was to destroy the atmosphere out there, break down and

rearrange that brown soupy stew into a more salubrious mix of oxygen and inert gases. Roll on the day, I thought.

I walked on to the door of Airlock Two. On impulse I operated the door control and stepped through into the lock. A row of atmosphere suits stared down at me from a rack on the wall. I walked across the compartment to the opposite door and again operated the door control.

The door did not open.

"Inner door remains open," said the autovoice of the door, presumably a circuit of the main station systems computer. "Further, sensors indicate that you are inadequately protected."

Startled, I took a step backwards.

"Trying to get yourself killed, Lewin?"

I turned to see Norman Remus standing in the inner doorway, grinning faintly.

"I thought..." I said. "I thought this door led into the vehicle bay."

"The vehicle bay is attached to the main lock," Remus said, "on the opposite side of the station. This lock leads out to the surface. Directly out. What are you doing here, anyway?"

"I couldn't sleep," I said. "I was just exploring. Wandering around."

"You nearly repeated history," Remus said. "This is the lock through which our previous recreation officer made his final exit. Perhaps he was just exploring, too."

I walked out of the lock and closed the door behind me. My heart was rac-

ing, even though I knew that I had not been in any real danger.

Remus was staring out through the observation portal, apparently entranced. I followed his gaze.

It was still a compelling sight. The very atmosphere seemed alive. I knew very well that nothing lived out there, nothing beyond certain forms of plant life of the most rudimentary and uninteresting nature. This had been well established by scrupulous and incorruptible surveys. Still, it was more than a little frightening. When I reflected on the fact that I had nearly walked out there, unprotected, I could only feel a tightness in my stomach.

"You feel it, don't you?" Remus asked, conversationally.

"It?"

"Feel whatever it is that's out there."

"Out there?"

"Out there. Waiting for us. Hating us. Or loving us."

"But there's nothing out there," I said. "Nothing but murk and the most rudimentary forms of methane-based plant life. Nothing to speak of at all. Surveys have established this."

I wondered if Remus was trying to play some sadistic joke on me. But he seemed perfectly serious.

"The survey lied," he said. "The company lied. There's something out there, watching, waiting. I feel it. Everyone does, although they won't admit it. Duggan especially."

"Duggan?"

"I think Duggan even heard it. Heard it speaking to him. Sometimes he would just get this blank look in his eyes and sit very still as if he was ... listening."

"Tell me," I said, carefully. "Do you hear it too?"

"No," he said. "Not yet."

"And you think this was connected with ... with what happened to Duggan?"

Remus looked at me closely. "You don't believe me," he said. "That's all right. I don't blame you. But perhaps you will."

He stepped past me and pressed his face up against the glass of the portal. His whole body shivered. He turned back.

"You're a detective," he said. "Isn't that so? You came here to find who killed Duggan."

"Killed Duggan?" I affected surprise. Indeed, I was surprised. "I understand it was a simple case of suicide. You think someone killed him? Who?"

"You're the detective."

"But I'm not a detective," I said. "I'm a recreation officer. Investigating murders is quite beyond the scope of my job description. That's the most ludicrous thing I ever heard."

"I don't envy you," Remus said. "I wouldn't want to take on this particular case."

"I'm not a detective," I said. But it was obviously hopeless. Paranoid. The man was paranoid, quite seriously de-

ranged, and I should have discerned as much earlier. And this was only further evidence of the seriousness of the situation here.

Yet, at the same time, with peculiar acuteness of the psychologically marginal, Remus had struck uncomfortably close to the truth of the matter. For I was, in my own way, a kind of detective. And my sensitivity to the life of the emotions, together with my intellectual capacity to pick out and synthesize the larger patterns behind the ebb and debris of everyday life, uniquely qualified me for this unexpected development. If Duggan had indeed been murdered, then who better to track down and apprehend his killer? Who better?

In the station library I studied again the transcripts of the testimony of the station crew in the matter of Arthur Duggan. As I had recalled, there was absolutely no mention of the possibility of murder, no reason to suspect it at all.

Valerie Theron: I noticed he was missing in the morning. I had taken a sleeping medication the night before, and I would not have heard him come in. I thought little of it at first. He did not always sleep in our quarters. But when I did not see him all day, I reported as much to Commander Muller and we organized a search. He was nowhere in the station. All suits and vehicles were present. Presumably he was

outside. We tried to find his body, but wind and visibility conditions made the task impossible. In any case, his body could have been blown clicks away in the storms. Why did he do it? He was depressed, I suppose.

Greta Vichevski: His physical condition was good on his last checkup. He appeared depressed, but there did not seem to be a physiological basis for his symptoms. He would not discuss what was troubling him. He never mentioned to me the "dreams" referred to in his apparent suicide note.

Norman Remus: I saw him in the outer corridor near Airlock Two, after the evening meal, I would guess about 2030. He was looking outside. I thought nothing of it, as I often saw him there. We did not speak. I left him there and went to the library to borrow a book, returning by a different route. That was the last time I saw him.

Charlotte McKinley: I saw him last at the evening meal. He seemed withdrawn, as he had been for some time lately. Somehow I wasn't surprised when I heard what he had done.

Franz Muller: Recreation Officer Duggan had been functioning below expected efficiency for some time, and I had confronted him about this several times with little noticeable effect. Initially a gregarious sort of fellow, he had undergone a tremendous transformation in personality. I have no definite explanation for this. It may be that he was experiencing marital difficulties. It may be that he was not really

cut out for this kind of work. He had never worked before in such a highly isolated location.

At last, I slept. I slept restlessly however, disturbed by strange and vivid dreams. Dreams of the outside, dreams of the storms. It was as if I stood naked on the surface and breathed its ineffably sweet air. At the same time, as the storms surged around me, I heard ... voices. Voices of rage and pain. And soft, crooning, ecstatically erotic voices, calling to me....

Reviewing these dreams in the cold light of morning, I had little difficulty in explaining them adequately. Information-processing activity of a very low order, my conversations with Remus and speculations about Duggan played back to me in almost raw form, with certain infantile overlays of sexuality and anxiety. And still, for all of my logical analysis, the dreams had disturbed me more than I liked to admit even to myself.

I decided, then, that I must at the earliest opportunity venture outside the safe and secure world of the station and confront the situation outside, confront it directly and demystify it utterly, once and for all.

"I want to go outside," I told Muller, over breakfast.

"Really?" He seemed surprised. "That isn't part of your duties, you know. And it isn't very exciting out there, I can tell you. Why would you want to do that?"

"Just to see," I said. "To see and understand the situation in which I find myself. Where there is understanding there can be no fear, no mystery."

"On the contrary," Vichevski said. "Where there is understanding there can only be fear and mystery. Because we can never understand everything."

"Perhaps so," I said, somewhat startled by this manifestation of a previously unsuspected philosophical streak in our medical officer, but unwilling to engage in sophomoric debate. "Nonetheless, I should like to go outside."

"And so you shall," said Muller. "However, no one may go outside alone. You will have to wait until one of us needs to go outside in the course of our duties. That will happen soon enough. But no one is going to go out there without some good reason."

"Except Duggan," Remus said. "And possibly he, too, had a good reason."

Muller raised his hand, palm outstretched. "We will have no more discussion of Duggan. We will close that chapter of our lives."

Possibly Muller believed he was protecting Valerie Theron. Possibly her response was intended to demonstrate that she needed no protection.

"One wonders," she said, "whether this is an inherent personality flaw among recreation officers. This desire to hurl themselves, lemming-like, into the great outside."

This was the first time I had heard her speak of her departed, and apparently little lamented, husband. I found it somewhat shocking.

Theron herself broke the silence which followed this remark. "Although it may be," she said, "that we have unnecessarily maligned the poor little lemming. Lemmings, despite popular misconceptions to the contrary, do not in fact engage in periodic bouts of mass suicide, do not deliberately hurl themselves over cliff tops and into great hurtling rivers."

"Really?" McKinley asked. "I could have sworn I saw a vid...."

"A product of clever editing, perhaps," Theron said. "Or perhaps they merely took a few buckets of lemmings and threw them off the cliff."

She took the final bite on her toast, wiped her hands carefully on her napkin, and arose from the table.

"If you'll excuse me," she said. "I have work to do."

"Valerie," Muller said, "has been under some strain. The shock of Arthur's death has affected her more than she cares to admit."

"Of course," I said. "Of course."

"All the more reason," Muller said, staring directly at Remus, "why there must be no further talk of Duggan. No more. On this point I must insist."

That evening, I made my official debut as recreation officer. In all honesty I must concede that it was not a conspicuous success. Only Muller, Vi-

chevski and McKinley bothered to show up, and Vichevski soon excused herself by pleading a headache, so putting paid to a desultory game of bridge.

I then attempted to introduce Muller and McKinley to the joys of *Swoosh!*, a new interactive video game lately the rage back on Earth, but my own understanding of the rules proved somewhat shaky and led to a certain confusion.

At the conclusion Muller rose and thanked me profoundly. "It has been most diverting and entertaining," he said, "and I anticipate many more such happy evenings. However, I must now take my leave to attend to certain procedural work."

McKinley made no motion to leave. We stared at each other across the table.

"I was disappointed," I said, "that Norman could not be with us tonight."

"Norman doesn't like games. In fact he doesn't like much of anything."

"I had a rather curious conversation with him last night," I said. "About the outside."

"Yes?"

"Norman seemed to think that there is something out there. Something ... living."

McKinley sighed. "He told you? He used to at least have the sense to keep his mouth shut with the others. Although I can't say I really want to hear about it either. My husband is ... disturbed. As I'm sure you must have

realized for yourself. It began with Duggan."

"His death, you mean?"

"Before. Long before. Almost from the start of the tour. Norman became obsessed with the idea that Duggan and I were interacting, sexually speaking. He became quite jealous and possessive, even though our contract was strictly exogamous. Then he began this nonsense about the outside."

"And were you?"

"Were we what?"

"Interacting?"

"Sexually? I don't believe that's really any of your concern, Mr. Lewin."

"Jake," I said. "You're quite right. But let me ask you this. Norman indicated to me that the late Arthur Duggan also believed that there was, uh, *something* out there. Do you suppose that could be true?"

"He never mentioned that to me. But, then, Arthur Duggan was a very private sort of person, for all his apparent gregariousness."

McKinley paused and looked at me carefully. "You're a very curious man," she said. "You ask a great many questions — for a recreation officer. You know that Norman thinks you're a detective. Crazy as he is, and crazy though it sounds, I wonder if he might not be right."

I laughed uneasily. "I can assure you that I am not a detective."

"But it would be so exciting if you were," she said. "We could certainly

use some excitement around here. Not to criticize your admirable efforts towards the provision of creative recreational activities, of course."

"Perhaps I should break out the Cleudo," I said.

"Cleudo?"

"Classic detective game. We must have one in stock here. But seriously, suppose I was a detective. What would I be detecting?"

"Duggan's death. You would want to be sure that there was no — what do they say? — *foul play* involved."

"And was there?"

"There you go again," she said.

"I'm playing detective," I said. "It's more fun than bridge. Suppose there was foul play. Who might have killed him?"

"Norman," she said, promptly.

"His motive?"

"Jealousy. What you might call a crime of passion."

"Unless," I said, "Norman is a saboteur, sent here by a rival combine to destabilize the station and thwart the development plans of the company. Or a political subversive, some sort of militant Contractionist."

"How unflattering," she said. "And even if that was his motive, why kill Duggan? If I wanted to sabotage this place I would hardly begin with the recreation officer, who is not exactly, with all due respect, a key individual in this set-up."

"A good point," I said. "And in any event, if sabotage was the motive, we

could hardly exclude anyone here as a suspect. Except myself, of course. My innocence is obvious."

"I don't know if I would go so far as to say *that*," she said.

"How very exciting," I said. "And how very unfortunate that I am not, in fact, a detective."

"Perhaps not," she said. "And yet there is definitely something strange about you. Strange, but not unappealing."

Again, that night, I slept restlessly. Again, in my dreams, I walked the surface of Gehenna, walked and walked, while the voices rose up around me.

"You're in luck," Muller told me, at breakfast.

"I am?"

"You wished to venture outside, did you not? Well, Dr. Theron is going out in the groundcar to collect various samples to test the progress of our activities here. I have assigned you to accompany her."

I looked across to Theron. She stared back at me coolly. She did not seem entranced with the idea, but I doubted that she had raised any objection. That would not be her style.

"When do we start?" I asked.

"Meet me at Airlock One at 1000 hours," she said.

"And don't forget your atmosphere suit," Remus said.

* * *

As the groundcar jolted over the bumpy surface away from the station, the winds buffeting us seemed to ease noticeably. Watching the great bulk of the station fade and finally disappear into the murk, I felt a flicker of panic. It was scary out there, even in the insulated world of the groundcar.

"How long," I asked Theron, "could someone survive out there? Without a suit?"

"How long could you hold your breath?"

We jolted onwards in silence, the car following its preprogrammed course towards the beacon planted by Theron on an earlier expedition.

"'Overwhelming and merciless'," I said.

"What?"

"Out there," I said, gesturing. "'Overwhelming and merciless forces of destruction.' A phrase that happened to pop into my mind. S. Freud on the external environment. And he, of course, was talking about Earth. Or even more specifically, I suppose, Vienna."

"S. Freud? You're rather erudite. For a recreation officer."

I covered my slip as best I could.

"An acquaintance with psychology is part of our training," I said.

"No doubt."

"Could life survive out there?"

"It does, for the moment. Part of our agenda today is the collecting of plant samples to see how well it survives."

"Not the plants," I said. "Something else. Possibly intelligent. Something we have failed to take note of."

She looked at me curiously. "That's three."

"Three?"

"Three people to ask me that question. First Duggan. Then Remus. Now you. Three."

"It's a natural question," I said.

"Quite unnatural, I would have thought. You've been briefed on the surveys. There's nothing here but rudimentary vegetation."

"So Duggan thought there was something here," I said.

"I didn't say he thought there was. I said he asked if there could be."

"When was this?"

"You do ask a lot of questions, Mr. Lewin. In any case, I can't really recall. Some months before his death, certainly. I was somewhat surprised. I had never detected any interest in exobiology in him before."

The groundcar came to a halt.

"First stop," she said. "I'll take care of plants and soil, you collect the atmosphere samples." She handed me a rack of flasks.

We closed the faceplates of our atmosphere suits. By sign language, she indicated that I should switch on my suit radio.

"I'm going to turn on the car's homing signal," she said.

She flipped a switch on the instrument board of the car. A beeping noise sounded in my headphone.

"Hear it?"

I nodded.

"If you lose your sense of direction, head back to the car. If you get hopelessly lost, put on your own homing signal and I'll come and get you."

She pointed to a control on the chest of my suit.

"Clear? All right, when we get out I want you to take fifteen paces from the car and fill the flasks. Then come back here."

"No problem," I said.

But on that score I was wrong.

Fifteen paces out, the homing signal still beeped in my ear, a little fainter but reassuringly audible. The murk had closed around the car behind me, around the figure of Theron. All points of reference were gone.

I opened the flasks, one by one, watched the gauges indicate them filling up.

And then the beep was gone.

No problem, I told myself.

I finished filling the flasks, returned them to the rack, and turned around.

Fifteen paces, I told myself.

I counted them very deliberately. Twelve. Thirteen. Fourteen. Fifteen. Sixteen....

When I got to eighteen I stopped and took stock. Obviously I had veered off at an angle. But the car had to be somewhere close. I walked three paces back, three to the left, six to the right....

Fighting panic now, I called into my radio.

"Theron," I said. "I'm lost. Where are you?"

No reply. No sound at all in my headphone.

She's gone, I thought. Driven off and left me here to die.

My heart raced in my chest. My inner suit was soaked in sweat. I fought down an impulse to scream.

Calm yourself, I thought. Mechanical failure, is all. My receiver is dead. Mechanical failure. Or was it made to fail?

No profit in that line of thought. Activate homing signal.

I pushed the switch on my chest. I heard nothing in my own headphone. Was it working? Had I switched it on correctly?

It was then, while I was fretting over the switch of my homing signal, that I saw ... saw whatever it was that I saw. The murk began to thin out, to become merely misty. And through the murk, towering high above me, I saw the gigantic figure of a man. A man standing perhaps a klick tall. A gigantic and terrifying man.

The features were vague and hard to discern. And yet I was nearly convinced that they were the features of Arthur Duggan, recognizable to me from photographs and tapes.

And ringing in my ear were the voices, the sirens, the very same voices that had called to me in my dreams.

I am not ashamed to admit that I did scream. Again and again.

And then the mists closed around

that figure, and the voices were gone, and I was again surrounded by the swirling murk of Gehenna. I staggered, as though I had been hit a physical blow. I fell to my knees. With my gloved hands I tugged at the alien soil of the planet. A clump came away and I held it up to my faceplate. Under the light from my helmet I saw a brown mossy substance made up of thousands of tiny tendrils. I threw it away from me. I began to cry.

I felt a hand grip me by the shoulder and spin me around. A figure in an atmosphere suit loomed over me. Theron. She put her faceplate up against mine so that her voice would carry through the glass.

"Lewin," she said. "What the hell's the matter with you?"

Muller was perturbed to hear of the failure of my radio receiver and promised to have it investigated. He was perhaps even more perturbed to hear how poorly I had handled myself in the extremity that had developed.

"I suppose it must have been frightening," he said, after Theron and I had made our report. "Still, this only confirms my belief that the outside should remain the province of qualified personnel. There will be no more trips outside, Lewin."

My own report was incomplete. I was not about to tell Muller, or anyone else, just how frightening the experience had been.

"Did you see it?" I had asked Ther-

on, as we jolted back to the station.

"See what?"

"The mists seemed to lift," I said. "I thought I saw...."

"The mists do lift, periodically. Atmospheric fluctuations. I noted that myself. But what did you see?"

"A mountain, perhaps."

"Not a mountain," she said. "It's flat as a pancake in this area. A trick of the light, perhaps."

"Yes," I said. "That's what it must have been."

Later, Vichevski commiserated with me.

"I was sorry to hear about your unfortunate experience," she told me. "For myself, I would never venture outside this station. Indeed, sometimes I wonder whether I should even be here."

"Why should you not be here?" I asked.

"Why should any of us be here? In a place like this?"

"A Contractionist would ask such a question," I said.

"Obviously I am no Contractionist. How could I be? I have no objection to the colonization of suitable worlds. But we may not belong in places like this. This is by far the least hospitable planet to which I have ever been assigned."

"But not forever," I said. "Ultimately Gehenna, too, will become, as you say, suitable. We shall remake it, reshape it to our own requirements."

"There are so many worlds," she

said. "There is no rational reason to pick on this one."

"I disagree," I said. "This project is eminently rational and cost-effective. Otherwise our employers would hardly be engaged upon it. In any event, we could hardly let a place like this defeat us. We can hardly permit a failure of nerve. We have come too far for that. We can only go forward. Otherwise...."

I realized that I was shouting. I was becoming entirely too emotional about this. Vichevski's mild speculations were disturbing me out of all proportion to their true significance.

"Otherwise?"

"Otherwise the whole thing would be meaningless," I concluded, more quietly. "Don't you see that?"

"Surely only a man could talk such nonsense," Vichevski said. "Many things are meaningful, beyond our technologically driven conquest of a hapless universe. More meaningful, perhaps."

"For example?" I asked, though I knew perfectly well what she would say. Some things are dismally predictable.

"Living. And loving. Taking care of one another. Building a better world for future generations."

I knew better than to argue with such sentiments.

"I thought that's what we were doing here," I said. "Building a better world."

"We're destroying," she said. "And

we know it, all of us. Even Franz. How do you sleep, Mr. Lewin? Not well, I would imagine. One does not build a world by destroying it."

"I sleep perfectly well," I said. "And speaking personally, I would like nothing better than to destroy that murk out there, obliterate it utterly. When that is done, my sleep will be even sounder."

So Vichevski was a closet Contractionist, and my radio had possibly been sabotaged, and I was seeing visions of gigantic dead men. As if all this was not enough, I also had to handle McKinley, who came uninvited to my quarters that night.

"You must be close to finding the killer," she said. "I hear he tried to kill you. Or she."

"The joke wears thin," I said. "I'm really not in the mood. It was merely a case of mechanical failure."

"Do you think it was Theron?" she persisted.

"It was Theron who rescued me."

"Perhaps her nerve failed. Or perhaps she was merely trying to warn you off."

"I told you, I don't want to play. I'm too tired for this. I'm just a simple recreation officer."

She held up a sheaf of papers. She began to read. "*Social interaction in the station is so atomized as to permit virtually any act to go unobserved. One cannot then discount the possibil-*

ity that AD was indeed disposed of in some way. The excessive morbidity of NR...."

She was reading from my own notes.

"Where did you get those?" I asked.

"From your desk. While you were out having your great adventure. I was playing detective. And what are you playing?"

"I'm a psychiatrist," I said. "Morale Bureau. Sent here to investigate the situation morale-wise."

"And how is the situation, morale-wise?"

"You hardly need my prognosis."

"And will you close down the station?"

"I have reached no conclusion as yet. More likely we would replace some or all of the crew."

"You think the problem is in the crew?"

"Of course," I said. "Where else would it be?"

"Where indeed?"

"I would appreciate it," I said, "if you could keep this matter of my identity to yourself for the time being."

"Of course," she said. "It's far more exciting that way."

Later, after McKinley had left my quarters following several hours of unscheduled and exhausting but hardly unpleasurable recreational exertions, I reviewed the situation. Things had not gone exactly as I had planned. But, then, matters were rather more complex than I had originally anticipated,

and clinging to my original program would have demonstrated only an excessive rigidity. In retrospect, in fact, I had to congratulate myself on my creative improvisation. McKinley might yet prove a useful ally in my investigation, if she could be trusted — a question on which I was as yet undecided.

The next morning I visited Theron in her laboratory, where she was hard at work analyzing the samples we had collected the day before.

"Recovered?" she asked, drily.

"Thank you, yes. I wished only to apologize for any inconvenience I may have caused you."

"I accept your apology," she said. She turned back to her work bench, as though to dismiss me.

"How is it?" I asked. "The plant life, that is."

She held up a sealed bottle containing vegetation and atmosphere from the outside.

"Degenerating, I believe. Or, at least, there have been some marked changes in the genetic structure. It's almost as if it was trying, unsuccessfully, to adjust to the higher oxygen content. But we have not been here long enough to draw any firm conclusion. We simply don't know enough about the life cycle."

I took a step forward to peer into the bottle.

"What are they?"

"It, really. Not they. There is only one life-form here as far as we can de-

termine. One great big carpet of ground-level vegetation covering the planet wall-to-wall. Except there are no walls. Except around this station."

"Does it bother you? What we're doing here, to the moss."

"It's not something I take lightly. But one cannot anthropomorphize. One cannot allow oneself to become sentimental about relatively insignificant life-forms."

"Every species for himself," I said.

"Yes," she said. "Himself."

The next day I deliberately sought out Norman Remus. He was alone in the control room of the station, pouring over the readings coming in from the substations and swearing softly to himself.

"I'm busy," he said. "There's a glitch at substation four. And I'm not interested in signing up for recreational activities."

"That's not what I wanted to talk about."

He turned in his swivel chair. "What did you want to talk about?"

"A few days ago," I said, "you mentioned your feeling that there was something ... something living outside the station."

"What of it?"

"Yesterday, when I was outside with Theron, I thought I saw ... something."

"What sort of something?"

Remus, suddenly, was interrogating me.

"You tell me," I said. "Tell me what you saw."

Remus pondered.

"I saw nothing," he said. "Nothing at all."

He swiveled back to his control board.

"All right," I said. "Me first. I saw what seemed to be a man. A gigantic man."

Remus swiveled back.

"Duggan," he said. "You saw him too. Jesus Christ."

He shook his head from side to side.

"What is it?" he asked me. "What the Christ is it?"

It was at that moment that Muller lumbered into the control room.

"Later," Remus said.

But there would be no "later" for Norman Remus.

At 1730 that night an alarm signal summoned us to the main lounge. Theron was waiting for us.

"We have an emergency," she said. "As acting commander, I must ask Dr. Vichevski and Mr. Lewin to accompany me." She turned to McKinley. "You," she said, "will have to mind the store."

"Acting commander?" I said. "Where is Muller? And where is Remus?"

"That's the emergency. Muller and Remus have been involved in an accident near substation four. I will explain on the way. Time may be of the essence."

We rushed to the main dock and embarked in one of the fliers. Theron punched in the program to substation four. As the flier lurched upwards into the skies of Gehenna, she outlined the situation.

Muller and Remus had left the station at noon, taking a flier to substation four to correct an apparent operational defect in the pumps. At 1415 they had radioed their safe arrival. At 1445 they had radioed that there was no apparent mechanical problem — the glitch was presumably in the main computer — and that they were commencing their return journey.

There had been no further radio contact. The flier had been logged in as overdue, and attempts to contact it had proved fruitless.

Theron pulled out a map. "We are picking up what may be the homing signal of the flier, here." She pointed. "About fifty klicks from the substation, though completely off course."

"Can we reach them in this flier?" I asked.

"No," Theron said. "The fliers can land only in the stations. We will have to take a groundcar out from substation four. Assuming we reach four by 1945, and assuming another hour by groundcar, we should rendezvous by 2045. Perhaps later. We have little experience in running the cars over such distances, and the terrain around four is hillier than around our station."

"How much oxygen does a flier carry?" I asked.

"For two people, approximately twelve hours. If we assume they crashed at about 1500 and that the flier remained intact, they're safe until 0300. Plus their suits are good for eight hours apiece."

"And if the flier cracked open?"

Theron glanced at Vichevski.

"Then it's down to the suits," she said. "It gets tighter, but not uncomfortably so. A good two hours leeway."

"And if the suits were damaged?" Vichevski asked.

Theron spread out her hands, palms open.

"That's the worst case," she said. She did not need to elaborate.

The flier lurched suddenly. Vichevski suppressed a yell of surprise.

"Normal turbulence," Theron said. "These machines can handle much more. There was no reason why one should have crashed. But for mechanical failure."

"Or sabotage," I said.

"Why do you say that?"

"I don't know," I said. "We seem to be having a lot of mechanical failures around here."

Vichevski was staring fixedly out of the window of the flier, although there was little to see. It was night out there and the murk was almost impenetrable, even fifteen clicks high. Occasionally one could catch a glimpse of Alpha, the larger of Gehenna's two satellites — invisible from ground level — racing through the sky.

"I'm sorry I had to ask you to come," Theron told Vichevski. "But we may need a medical officer."

"Better to be here than back at the station waiting," Vichevski said. "Although this world terrifies me."

Vichevski, it seemed to me, was reigning in her emotions only by sheer force of will. Theron appeared as cool and detached as ever.

I stared back out of the window. Duggan's face stared back in at me, then flickered away.

"Jesus," I said, involuntarily.

"Did you see?" I began. Clearly neither of them had seen. "I thought I saw..." I stopped myself.

"Another trick of the light?" Theron asked, icily.

Disintegration. The entire crew was disintegrating, and me along with them. Even as the flier settled down into the landing bay of substation four, I felt a deep sense of foreboding. Our mission, I thought, could not possibly succeed.

We scrambled out of the flier and into the largest groundcar available. Theron locked it on the homing signal of the crashed flier, and we bumped out on to the surface of Gehenna.

"1950," Theron said. "Projected rendezvous, 2050."

But the groundcar's progress up and down the hills was excruciatingly slow and painful, the engine complaining alarmingly along the way. We

picked up speed as we hit a flat stretch. Then we shuddered to a complete halt. Theron attempted to put the car into reverse, with no success.

"We're stuck," she said.

"Stuck?"

"Ground water," she said. "From the fractionation. You see it sometimes near the main station. Usually it just drains away. But it's rocky around here, and the surface soil and vegetation have become marshy. The tracks are stuck."

She got up from the controls. "We'll just have to push it out," she said. "Vichevski, you take the controls. I'll tell you what to do. Lewin, you come with me."

Terrified, I followed her through the lock and out onto the surface. Immediately, my boot sank in the muck up to its ankle. I froze, one foot on the step of the groundcar, one foot on the ground. We'll sink, I thought. We'll be swallowed alive by this filthy planet.

"Come on," Theron said.

I forced myself to put my other foot into the muck and to shuffle to the front of the car where Theron was already waiting. Theron signaled Vichevski to put the machine into reverse. We pushed.

It was amusing, in a way, to be reduced to this. Reduced, for all our technology, to excruciating physical labor. Mostly, though, I was afraid. I was never more aware of our appalling vulnerability on this distant and hostile world.

I had no idea how long we worked to free the car. It seemed like several hours. I was surprised to hear that it had been a mere twenty minutes when I slumped, exhausted, back into my seat. We drove on, cautiously. Our margin of error was less than a half hour by the time we finally reached the flier. It lay tilted at a crazy angle, its belly ripped open.

Muller was alive but unconscious, his suited arm twisted beneath him, his respiration shallow.

Remus was dead, the faceplate of his suit apparently shattered by the impact.

We dragged them back to our groundcar. Theron paused to remove the log tapes from the control panel of the crashed flier. Then we began our long and wearisome journey back to Station Gehenna.

We placed Remus' body in cold storage for eventual shipment back to Earth. McKinley, who seemed oddly calm, had proposed that her late husband be buried outside the station, where his substance might make an interesting contribution to the great project in which he had labored so long, the terraforming of Gehenna. This was, however, contrary to the manual of operating procedures.

Muller had suffered no more than a broken arm and several broken ribs.

"I don't know what happened," he told us. "Norman was at the controls, although the controls were of course

on automatic. And then he sat forward in his seat, as though he saw something out there, out in the murk. And whether by accident or on purpose, he pushed the manual override. And then we went down like a stone."

"Saw something?" I asked. "Did you see anything?"

"What could I see?" Muller asked. "The moons? I saw nothing. There is nothing that can account for it."

I believed that I had a fairly good idea of what Remus had seen. I was not sure quite what to do with that information. And yet I could no longer keep silent about it.

I found Theron scanning the log tapes from the flier.

"Anything?"

"Nothing."

"Then there's something I must tell you."

I told her, then, of what I had myself seen on our ill-fated sample-gathering expedition, of what I had seen again in the flier on our rescue mission. I told her also of my conversation with Remus.

She listened quietly, raising none of the objections I had expected. When I had finished she said nothing at all.

"Well?" I asked. "Do you believe me?"

"Believe what?" she asked. "That you saw what you claim? I see no reason why you would lie. Believe that what you saw was real? I'm not predisposed to believe it. Psychiatry is hardly my field, but the most parsimonious

explanation here would surely be some sort of *folie à deux* between you and Remus."

"Or *trois*," I said. "If you count Duggan."

"We don't know what Duggan saw," she said. "But I take your point. There is something strange going on at this station. But I do find it hard to believe that Arthur Duggan is still, in some altered form, alive." She smiled. "An interesting question," she said, "for my lawyers."

"Duggan is dead enough," I said. "And I am not claiming that what I saw was 'real.' Obviously it was a delusion. The problem is how I was induced to see it. And why."

"You have some theory on that score?"

"Several," I said. "All rather far-fetched. For example, sabotage. It may be that someone here is trying to destabilize the station. Inducing delusions by means of some sort of psychic field generator or projector. I have never heard of such a device, but I must suspect its existence. Otherwise...."

"Otherwise?"

"Otherwise I must believe that the problem lies outside the station. That some alien agency is at work here...."

"I agree," Theron said. "I would also prefer to believe in sabotage. Although that would hardly be much easier to believe. Do you have a candidate in mind?"

"I suspect everyone. And no one."

"You know," Theron said, "that

this can only sound rather paranoid. Saboteurs. Delusion machines. Aliens."

"I know exactly how it sounds," I said. "Which is why I want to propose a test."

"To flush out the saboteur?"

"Or the aliens," I said. "Which ever."

In asking Theron to accompany me in an attempt to make contact with a previously unsuspected alien life-form, I had a certain hidden agenda. If there was indeed a saboteur among us, then the likeliest candidate for that role was Theron herself. Or so it seemed to me. The gaps in her testimony concerning the mental state of Arthur Duggan, the curious failure of my suit radio, the bogging down of our groundcar in the mud ... all these things pointed suspicion in her direction.

If I was right, then I was exposing myself to considerable risk. And yet, simply staying on this planet was a risky enough proposition. Even if the company were to respond immediately to Muller's request for relief, no ship could be here in less than two weeks.

"This is rather beyond the call of duty for a recreation officer," Theron said, as our groundcar jolted out of the airlock.

"I have a personal stake in this," I said.

"And a professional stake."

"I'm sorry?"

"You're some sort of detective,

aren't you? We suspected that from the beginning."

"We?"

"The crew. Even before you arrived. We figured there would have to be an investigation of Duggan's death, one way or another. And you were the obvious candidate for investigator."

"I'm not a detective," I said, a little wearily.

"But something like it," she said. "And obviously you suspect me."

"You," I said, "and everyone else."

We moved on towards our test location, the spot where we had gathered samples a few days before, the spot where I had seen the giant figure of Arthur Duggan.

"There's something else strange," I said, suddenly struck by an insight. "The pattern of all this. For some reason, it seems to affect only the men. All of us but Muller. And he too may succumb."

"I don't understand," Theron said. "You think we're dealing here with a cabal of feminist saboteurs? Or feminist aliens? You think we're all out to get you?"

"I'm just suggesting that men are more susceptible."

"The weakest links."

"Or the strongest. In the sense that what we're doing here, as Vichevski suggested to me in so many words, might be characterized as a distinctly masculine enterprise. The outcome, as it were, of aeons of biological programming to dominate and destroy

our environment. So in that sense, we may be more culpable...."

"It's a little late in the day for consciousness-raising, isn't it?" Theron asked. "In any case, I'm not sure I like that line of thought. It suggests that I am merely an appendage to the process going on here, where in fact I must share full responsibility for it."

"But in a philosophical sense...."

"In a philosophical sense, perhaps. But unless we're dealing with philosophical aliens...."

She did not complete the thought. The groundcar had come to a programmed halt. We put on our helmets. Theron took a five-meter length of cable and attached it to her belt, then to my own, linking us like Siamese twins. She picked up a vidcamera modified for outside use with a wiper over the lens and handed it to me. She picked up a combination radio receiver/tape recorder.

"Well," she said. "I feel very foolish about this now, and I will feel even more foolish afterwards. But let's do it."

We clambered out of the car and took up a position as close as possible to where I had stood a few days before. The beep of the car's homing signal sounded reassuringly in my ears. The murk swirled around us as usual. We stood still, watching, waiting. Nothing happened.

"All right," Theron said, finally. "Switch off your radio."

"Why?"

"To approximate conditions the other day. Switch off and try and concentrate on contacting ... whatever it is you think may be out here. If you see anything, run the camera. Pull the cable when you want to resume contact."

"All right," I said.

We stood in silence for a few minutes. The murk was so thick I could hardly make out the outlines of Theron's suit, and the groundcar was quite invisible. I felt very alone and cut-off. Predictably, the panic began to well up.

Anxiety, I thought. Perhaps this *thing* only responds to anxiety.

And then the scream resounded inside my head, bypassing my ears completely. It had nothing to do with radio signals. Radio signals did not enter into it.

The scream was both human and inhuman, anguished and exultant, of terrible pleasure and terrible pain. It was nearly overpowering.

And then the murk thinned out to a wispy mist, thinned out for clicks around so that I could see the groundcar quite clearly, see Theron jerking her head back in awe to gaze at the spectacular sight of the blazing white sun of Gehenna visible in the heavens. The moss beneath my feet began to shrivel and blacken under the glare. It was as if, quite suddenly, our work on this planet was complete, as if we had already succeeded in our transformation of the biosphere.

The giant figure looming over us now was not Arthur Duggan. It was a woman, no woman I had ever seen before and every woman, huge, naked, splendid.

Somehow I remembered to trigger the camera.

The scream had changed pitch now. It was softer, almost crooning. As it swept over me I felt an intense sexual desire. For the woman. For Theron. For every woman.

Contact, I thought. Concentrate on contact.

Tell me, I signaled, urgently. Tell me what you want.

But she had no words for me, no explanations. Only that soft crooning scream.

I began to stumble towards her, unwittingly dragging Theron along behind me. I took four or five paces before the mists closed down around me. Then it was Theron's turn to tug me back towards the groundcar.

Remarkable," Theron said, as I pulled off my helmet. "I've never seen a fluctuation like that. To see the sun itself!"

"The sun?" I echoed. "Was that all you saw? You didn't see her?"

"Her?"

"You didn't hear her?"

"I heard ... something," Theron said, reluctantly. "Something vaguely inside my head. A sort of tugging sensation. Just my imagination, I'm sure.

It was sort of..."

She trailed off.

"Sexy," I completed.

"Yes," she agreed. "Isn't that strange?"

In unspoken agreement, we began to remove our atmosphere suits, then our inner clothing.

"Who," Theron asked, as we collapsed onto the hard plasticated floor of the groundcar, "am I making love to?"

The same question was in my own mind. The scream still echoed faintly in my head as the familiar, but suddenly so unfamiliar, waves of pleasure engulfed us.

The vidfilm, predictably, showed nothing: nothing, that is, beyond the startling atmospheric shift that revealed the sun of Gehenna. The tapes, of course, were quite blank.

Nonetheless, I felt compelled to confront Muller with my conclusions.

"We must shut down the station," I told him. "Shut down all the terraforming machinery, pending further investigation. There is some sort of sentient life here and we are killing it."

Muller stared at me in amazement.

"Sentient life? What sort of sentient life?"

"I don't know," I said. "Maybe the moss. Maybe the planet itself. What difference does it make? The point is, we have to stop."

"You're insane," Muller told me. "I know this has been a very stressful ex-

perience for you here, but I am not prepared to listen to such nonsense. Not for a single moment. In any case, you must know that I don't have the authority to do what you are proposing. The company would never tolerate it. I must relieve you of your duties immediately."

"By all means," I said. "Relieve me of my duties as recreation officer. Because I am not a recreation officer. I am a psychiatric investigative officer for the Morale Bureau of R. G. Spitz, and as such I have the authority to do exactly what I propose. Turn off your machines."

Muller looked, uncertainly, to Theron, who had remained silent throughout my presentation.

"Is this true?" he asked.

"Is what true?"

"That he is a psychiatric investigative officer?"

"I don't know. It would seem likely. It would explain a good deal."

Theron, since our return, had been as cool and distant as ever, as though what had occurred between us had not occurred at all.

"And what of the planet?" Muller asked. "You also believe it is alive?"

"I don't know. Certainly it's a rather incredible hypothesis. Based on my own experience, I am unable to confirm his account. It is true that I felt something out there, but it could have been only my own suggestibility. I feel unable to make any recommendation on this matter."

"Turn off your machines," I said, again. "Or I must assume control and turn them off myself."

"Must you?" Muller asked. "And how do you propose to do that?"

"How do you propose to stop me?" I asked. "You have, after all, a broken arm."

"True," Muller said, opening his desk drawer with his usable hand. "But if we are going to bandy threats here, I must point out that I also have a weapon."

He showed me the laser piece.

"You are acting," he told me, "in a decidedly unbalanced way. I must ask you to remain in your quarters until I can direct Earth to straighten out this question of your identity. If you are indeed who you claim to be, I will forward your recommendations to the appropriate parties. In the meantime, the work continues."

He stood up and pointed the laser piece at me.

"After you," he said.

The door to my quarters was sealed, programmed to remain so on the station computer. I was, effectively, imprisoned. It did not open again until 2000 hours when McKinley brought me a tray of food from the galley, triggering the door release from the outside.

She placed the tray on the table and backed towards the door.

"Don't you want to hear about my investigations?" I asked.

"No," she said. "Because you're not a detective, not even a psychiatric investigative officer. In fact, you're the saboteur here."

"That's crazy," I said. "The dirac from Earth will soon tell you just how crazy."

"The dirac has been received," she said. "And has confirmed you as no more or less than a recreation officer."

"There's been some mix-up," I said, stunned. "Some mistake...."

"No mistake. I saw the printout myself. Theron brought it to Muller in the galley."

"Theron..." I said. "Then she faked it. Although I don't know what she can hope to gain from it."

I got up from my chair. "You have to help me," I said.

"Not another step," she said, bringing up a laser piece from the pocket of her tunic.

"Theron is lying," I said. "I am a psychiatric investigative officer. And I must speak to Muller. I've got to get out of here."

"You're going to stay right here," she said. Holding the piece aimed at me, she backed out of the door. It whirled closed behind her.

I crossed to my communicator and punched in Muller's code. The communicator was dead.

Hours later I woke from an uneasy sleep to find the door of my quarters open. There was no one in the corridor. The quietness was eerie. As my

head cleared, I realized that what I was hearing was complete silence: the familiar hum of the terraforming equipment was absent.

I got up and dressed quickly.

I hesitated at the doorway for a moment, as if uncertain of where I was going. And then, with growing conviction, I walked through the deserted corridors towards the central control room.

It was midway through the sleep cycle and the corridors were deserted. But the fluorescent lights still burned at full luminence, turning the high-gloss green paint of the walls into a mirror that reflected my own bloated and distorted face.

The control room was a shambles. Whole banks of machinery controlling the terraforming process were ruined. The indicators from the substations were dead. Only the station's life-support systems had been left intact.

There was blood on the floor, a thin trail of blood. I followed it out of the control room and down a corridor. At the end of this trail I found Muller slumped outside the door of his own living quarters. It was remarkable that he had been able to get even this far. Half of his skull was caved in, as though by a blow from a heavy instrument. He was quite dead, and cool to the touch.

I stepped past Muller's body and triggered the door of his quarters. Vichevski was in their bed, breathing steadily, apparently asleep.

I stepped out again and closed the door behind me. I signalled McKinley on the wall intercom.

"This is Lewin," I said. "Muller is dead. In the corridor just outside his living quarters. You're going to have to take care of Vichevski. I'm going to find who did this."

"You did it, Lewin," McKinley said. "Or are you too crazy to realize that?"

"Theron did it," I said. "Then she opened the door of my quarters to implicate me. In any case, I don't have time to argue. Just do what I said."

I cut the connection and set off in search of Theron.

There was blood on the sleeve of my jacket. Muller's blood. I paused to try to wipe it off, but succeeded only in spreading it onto my hands. Then I tried to wipe my hands on my trousers.

Macbeth, I thought.

I suppressed a giggle. Plainly, I was on the edge of hysteria.

I realized that I had stopped at an observation portal in the outer corridor. Outside the station, the murk that was the atmosphere of Gehenna seemed almost tranquil. And yet the voices that were suddenly inside my head were more powerful than ever, more agonized and more passionate.

I found myself, with no memory of the transition, at the door of Airlock Two. I punched the button, and the door rolled open in front of me. I step-

ped through and punched another button to close it.

A row of empty atmosphere suits stared down at me from the wall, but I walked past them unhesitatingly to the opposite door, the one which led out to the surface of Gehenna. I punched in the code for the door to open. It did not open.

I paused, confused, as the voice of the systems computer cut in.

"Sensors indicate that you are inadequately protected."

"Override," I said, dreamily.

"Regulations do not permit exit without adequate protection for ground conditions."

"Override," I said, again.

"Regulations..." the computer began again. It was not a very sophisticated piece of machinery, though adequate for most purposes.

"I heard you," I said.

I pulled down a suit from the wall and began to pull it on. It was then that it hit me.

"Cluedo," I said. The pieces, suddenly, fell into place. It was clear, finally, that Arthur Duggan had been murdered. Or at least, assisted in his own suicide. Duggan would not have been able to exit via Airlock Two without an atmosphere suit, unless someone had overridden the systems computer for him.... That someone presumably being Theron.

I knew all this, and I did not care at all.

I watched my fingers punch out the

exit code. The door still refused to open.

"Sensors indicate that faceplate remains unsealed."

I flipped the plate into place. The door rolled open. I stepped out onto the surface. The voices were reaching a triumphant crescendo, as Gehenna sang out its welcome.

I reached out to unfasten my faceplate. And then a gloved hand grabbed my arm. A helmeted face loomed towards me out of the murk, but I could not make out the features.

"Lewin," said a voice in my headphones. "Snap out of it."

We struggled. The other figure was strong, but I was stronger. My desire to taste the sweet, sweet air of Gehenna was overwhelming. I threw the other to the ground.

"Don't try to stop me, McKinley," I said, as the figure rose to a crouch. "This is right. You must see it. She wants me...."

"This is Theron," the other said, standing up but making no move towards me.

I hesitated. Something was puzzling me, tugging at the rational, reasoning part of mind....

"I'm finishing the job for you," I said. "Why try to stop me? It's all working out for the best. In fact, you might have made things easier for me. You could have overridden the exit-lock program for me, the way you did for Duggan. That way I needn't have bothered with this suit."

"That's right," Theron said. "Why should I try to stop you? Think it through, Lewin. Apply your wonderful powers of deduction."

"McKinley," I said. "She's the programmer. She let Duggan out. She unlocked my door tonight. She killed Muller. She wrecked the machines. She lied to me about the dirac. And she set me up to take the blame."

The voices were dimming now, dying out. The impulse to open my faceplate was still present, but no longer overpowering.

"Let's get back inside," I said.

Muller's body was still in the same position. Inside the room, Vichevski was crying and McKinley attempting to comfort her.

McKinley seemed shocked to see us together.

"I thought he'd killed you," she told Theron. "The way he killed Muller."

"You killed Muller," Theron said. "And Duggan."

There was a pause.

"I didn't kill Duggan," she said, finally. "I just helped him to do what he wanted to do. And what she wanted him to do. She wanted him so badly."

"She?" Theron asked.

"Gehenna," I said. "Mother Gehenna. It's like that terrible old joke where the astronaut meets God and people ask what God is like. And the astronaut says, well to begin with, she's black.... Gehenna isn't just alive. She's

female. And like McKinley says, she wants us."

"We woke her," McKinley said. "From endless sleep."

"We stimulated something," I said, "by our very presence here. Sparked off some adaptive change."

"The genetic change," Theron said. "Almost as if it absorbed Duggan. And no doubt it wanted Remus too. And you."

"Raw materials," I said. I shivered.

"Love," McKinley said.

"We have to get out of this place," I said. "This is no longer just a moral issue, of whether or not we're killing something sentient. We have to get out of here while we still can."

"She won't let us go," McKinley said, conversationally.

She pulled the laser piece out of her tunic and moved back from Vichevski so as to cover all three of us.

"We should never have come here," McKinley said. "Never ever. Should never have left Earth. I knew we had to stop it. Even before I came here I knew it was wrong. Violating the universe."

"You're a Contractionist," I said.

"I was," she said. "But it's too late for that now. Now I'm ... Gehenna."

She waved the gun at us.

"Move," she said.

"This is unnecessary," I said, as she hustled us towards the airlock. "We'll be leaving soon enough anyway."

"Gehenna doesn't want us to go," McKinley said. "Gehenna wants us.

Particularly you, Lewin. She particularly wants you."

We had reached the door of Airlock Two, McKinley punched it open with her left hand, holding the laser on us with her right. She gestured us in.

"You can't shoot all of us," I said, taking a step towards her. "Even if you could. She wouldn't like that. She especially wouldn't want you to shoot me." I took another step forward. "She loves me, after all. I'm sure you must realize that."

McKinley seemed confused. She continued to hold the laser pointed at me, but her grip seemed to waver.

"We'll go out together," I said. "Just you and I. She doesn't want the others. Just us." I was only a pace away from her now. The gun was pointed directly at my chest.

"Give me your hand," I said.

Slowly, carefully, I reached out my hand. She gave me her left hand. I stepped into the airlock, pulling her with me. I turned and punched the door shut behind us.

"You'll have to override the outer door," I said. "I don't know how."

The voices were back now, back inside my head, calling to me, crooning to me.... But this time I could fight them. She turned her head away from me only for a moment, to attend to the door mechanism. But it was long enough, quite long enough. I did not like to have to hit her. But still less did I want to breathe the sweet, sweet air of Gehenna.

Imagine, if you will, a frog that is bent on committing every foulness, every meanness, evil beyond your nastiest dreams. "A frog," you say. "A frog?"

That Frog

BY

MICHAEL SHEA

((An estimated 50,000 copies of the following narrative rained down upon the downtown area today, dropped by a fleet of helicopters whose identity or affiliation has not yet been established.

The pamphlets, weighing several ounces apiece, caused considerable startlement, and some disruption of traffic, but only one casualty has been reported. A south-central matron who was shopping in the Open-Air Market lay stunned in the fruit aisle for fifteen minutes before she was discovered, half buried by improperly piled cantaloupes which had collapsed under the impact of one of the booklets. She is listed in fair condition.)))

I first discovered that frog when I was fishing in the Greengum Bog, at the up-gulch end of Gulch. The wind rattles the trees considerably up there, and of

course there's lots of frognoise, but through it all I heard it: a wee smack-smacking behind me back on the bank, in the whereabouts of my baitbox. I looked around slow and saw that frog for the first time, just swallowing the last of my bait.

Now another man, a perfectly good man, might have just shot and forgot that frog, made nothing of it and let that frog go by. But I am a man who keeps a close eye to things, and I noticed something blood-curdling right away: that frog knew exactly what he was doing.

I looked closer then, and I discovered the really horrible thing: he knew that I knew it. That frog knew I knew he knew what he was doing, and moreover he didn't give a toad-turd that I knew and let me *know* he didn't. For this reason I didn't mess with my automatic. I snatched the pin from an

iron potato and lobbed it on him: square hit.

So square I'd turned back to fishing before the swampgrass stopped raining down. But it seemed I couldn't shake the chill of that meeting off, and the fish had stopped biting besides, so very soon I packed up and started back down the gulch.

I soon got back at ease, following Greengum Crick back down-gulch from the bog. But it didn't last, because after a few minutes I heard it — a croaking. A particular and undeniable croaking. The nasty, knowing croaking of that identical frog I thought I'd blown up.

I have to point out, for anybody who is a stranger to Gulch. Along that stretch of crick, why, by a modest reckoning, there are between seventeen and eighteen thousand million frogs. Yet, without boasting, I honestly could pick out each and every single croak that frog uttered.

He was following me, staying just behind. Each croak was like a bullying little nudge in the ribs, sarcastic, like from someone who knows you can't touch him. He was alive in there, without question, sneering undercover, tailing me. It was a cold feeling in all truth, until, very soon, I got entirely warm again with the heat of my unfriendly feelings for that frog. All right, I decided, this frog was the kind of thing that everyone knows is there and just hopes doesn't cross his path — but since he had crossed mine, why it

was up to me to show him he'd definitely picked the wrong individual to have a free-for-all with.

And, friends and citizens, those feelings stand to this moment. I was dead serious then, and now that frog owes a damnsite more. Now he has Fred to answer for, and Joe Widdles, and Joe Widdles' farm, all of Gulch Lake, and the town of Gulch itself. Fred, and Joe Widdles, that frog owes me personally. The rest he owes to society.

I can't say which of these personal losses was worst. Fred was closer, of course, but his end was quicker, while I had Joe Widdles' fate staring me in the face for a week running.

The way that that frog destroyed Fred taught me just how ruthless and clever he was. He started by spending the first couple weeks after our confrontation working me from a distance. Always at dusk or a little later he'd start his croaking, from just outside the fringes of my place. One of his favorite times to start his needling of me was when I went out with the evening slops to Fred and Oscar's pen. In fact that was a sneaky clue to the disaster that frog was planning, and it must have added a foot to his evil grin to know that I'd never read that clue till too late.

He started his needling fairly regular, as I say, but through the second week he began to develop the trick of croaking an hour or so for openers and then trailing off to a more and

more erratic croaking for the rest of the night. When he had started, and gone steady, I could sometimes half ignore him. But with his start-and-stop method, he had me waiting for the starts, listening for the stops — he had me concentrating more and more on him. Of course what he was doing was tightening my nerves like an expert tuning a banjo.

On the night of Fred's death, I was listening so hard and fierce that everything else got in my way. I decided he'd quit a dozen times, and each time he started up again it wrung more sweat out of me. By midnight my concentration was so fine that my watch suddenly got loud. After two ticks I pulled it out and bashed its springs out on the table and went on listening. I was tuned. All that frog needed to do then was to get Fred to throw a grunting fit.

Of course Fred often enough took to grunting of his own free will, usually along near moonrise, and when Fred threw this fit, the half-moon was just coming up. And of course this is just precisely the giveaway. The timing was just too perfect, just too damn convenient.

But none so blind as those who see nothing. At that moment all I knew was that I meant to keep my ear on that frog. I pulled out my quadrophone, guaranteed audible over a race riot, stuck it out the window, and roasted Fred's ears with it, to shut his jaws. My warning didn't quieten Fred. On the contrary, it startled him

so much that he raised up a grunting louder than *two* race riots. It was like my ears were the two handles of a crosscut saw that two devils were shoving back and forth across my brain. It drove me so mad I could have chewed up my own teeth and swallowed them. I had my air-cooled 50 cal. out there and had spent seven belts on Fred's head before I knew what happened. It was over before I even saw it coming.

Now as to Joe Widdles, I've pointed out already that he was a different matter. Him, and his farm, and his three prime sows — they were that frog's next victim. That disaster I saw coming — at least saw a part of it coming — for a straight week. I saw trouble like a vulture perched on poor Joe Widdles' rooftop, night after night for seven nights.

The first night was just after Fred's passing. I was walking down-crick from the bogs, and it was late. I was just passing Joe Widdles' farm, where the path runs near his barn, and I was thinking to myself how it had been a couple of days since I'd heard that frog. Exactly then, I heard him again. Where I heard him was a heartbreaking thing: his croaking was coming from inside Joe Widdle's barn.

Now in the up-gulch, it was known by all why Joe Widdles had that big lock on his barn door. It was because in there he kept his three sows — three of the sweetest most high-tailed alive, silky little barrels of premium pork

such as you could stare at all day long and not even think about lunch. And even as I stood there, those three sows were lost, and no one on earth could help them any more where they lay, defenseless in their pens.

I thought back then to how I'd offered Joe a keg of 400 octane to buy the pleasures of one of those sows' company for my Fred. Joe turned me down. He thought about it, then told me that the fact was, that Fred was just a shade too common for his girls. And in no way did I take this bad. I understood, I agreed. Even a handsome, nonsense hog like Fred was outclassed by those sows.

But there was no going back to those girls' lost innocence. It would have raised the hair on every neck in up-gulch to know who was with them now, who had probably *been* with them for who knew how long. I know that my hair stood up. Even my privates stood up, I felt so stunned with the thought.

My heart went out to Joe — he was my long-time decent neighbor. I decided then and there that there was no reason to put this heavy knowledge on him. The girls were ruined. Joe would have to know soon enough how their appetites had been polluted, but at least let it wait till he had the comfort of knowing they had been revenged too.

And I've never regretted that decision since, because as it turned out, Joe never did have to learn that his girls

had been fouled — he was spared that knowledge.

As for me, I started that same night, a Saturday, and laid plans to trap that frog, aiming for the following Friday night to spring it on him. I allowed myself none too much time as it happened, because it took me all of six days to arrange getting a pound of Dismal Jam from a witch in the south bog. On the Friday night following, the witch pulled up to my place in her wagon, a couple hours after dark. I loaded a bushel of coals into the wagon bed, then got up beside her, and off we drove to Joe Widdles' farm.

I had planned it tight, all to fit into this one night. For Joe Widdles customarily laid blind-drunk on his kitchen floor, from dusk on Friday, to dusk on Saturday. It was all the time I needed, with luck.

The witch drove us to Joe Widdles' still and I helped her start the bed of coals and melt down all his kettles and coils; then I helped her load the lumps of copper on the wagon. She gave the pound of Dismal Jam to me, and she drove back to her bog, while I hurried on down to Joe Widdles' barn.

I carried my Amplified Flame-thrower for Joe's two old dogs who slept in front of the barnyard gate. I meant to have the thrower set at *char*, but unbeknowing, had set it at *ash*. At the gate not only the dogs started up, but also both Joe's plough horses, and his two jennies, they all being very curious stock. So when I cut loose, at

the amplification I had, the whole barnyard was snuffed with less noise than dust settling. The only thing left moving was one hen with her tailfeathers on fire and heading for Joe Widdles' hayrick. But it was plain she'd burn out before reaching it, and I turned to my urgent mission, which was to take some 30 lb. snips to that lock. I was in to the barn in an instant. In the six days I'd had to listen, I'd never heard that frog in there before the small hours, which gave me two or three to work in.

I won't deny I used those three sluts how I wanted to, before I got to business. Hell, that frog had been depraving them for a week running. Those sassy degenerates were so corrupted now that they craved anything you could think of to do to them. I must say I don't know exactly how long I spent at this part of it. Then, in the end, I pulled on rubber gloves and lubricated all three of them with the dismal jam. Then I got out of the barn and left a duplicate lock on the door. Joe's hayrick was throwing up twenty-foot flames — it looked like that hen had made it. The rick was well removed from the house Joe lay drunk in, though, and there was no wind, so I went home to get some sleep.

And I was never to see old Joe Widdles alive again, it grieves me to the soles of my feet to say it, even now. I slept to the following evening, worn out with my efforts. But meanwhile Joe Widdles himself got up that afternoon

and stumbled outside. The boy that was his hand was witness to it. Joe stumbled out and was extremely dazed by what he saw and didn't see. His first thought after the shock was for his sows of course. He gave a shout and rushed to the barn.

When he found that they were still there, he must have fallen to consoling himself with them, because after he'd been in there three hours, the hand and the neighbors went in to see what had happened, and they found him with the Dismal Swelling already started. They dragged poor Joe Widdles to his bed, with his privates like a summer squash and his thighs like a pair of blimps. He passed a half-hour before I even got up, and of course his sows fell apart within the same hour.

As for that frog? He never showed at all that night, he stayed away. Because the next night, back he was, working on me from just outside the pen where Fred used to live and where now there was only Oscar. Choosing that spot, you see, just to rub salt in my wounds.

At this point another man might have folded his hand; another man might have asked himself just how much of a commitment he could afford to make against such odds. As for me, well, that was not my style and I think I can promise you that it will never be my style. What I did was to vow, shaking my fist towards where that croaking was coming from: *Mr. Frog, I said, stand back. Because I'm going to find*

you, and I'm going to go through you like crap through a goose.

But how? I would never have had a clue, if not for the pollster. He was a fat sort of cynic that never looked at anything you said head-on, but always squinted at it sideways. I knew him from previous coming-around, because whenever he stopped in Gulch Town he always came up-gulch afterward.

He showed up a few days after Joe's disaster, and this time his questions were about sweating, and how I felt about it in various different situations. I was answering him, though I was in none too good of a mood. Then I noticed something about this pollster. His breath. There was something wrong with it. It took me a second, and then I had it: his breath smelled of frog.

Up to now a countless billion frogs hadn't managed to put a froggy taint to the waters of Gulch Reservoir, which was the bath and beverage of every soul in the town below the dam. Why? Because it isn't just any frog who has the concentrated warty spitefulness and nastiness to accomplish it. Not any old frog, no — but *that* frog. And then I had to sit back and draw breath, stunned as I was to have been so blind, and to face such a threat as I now did.

Gulch Reservoir! Cleanest, cooling-est body of water that she was — what else could that frog's objective be? What else all along! Tormenting me and mine was a sideline, just to keep

his nasties in trim. His full-time job had been the befouling of that sweet body of water. All along.

I won't run on about how I felt, facing what amounted to a lonely responsibility which I couldn't share, not even with this pollster fruit, because though he sat so near I couldn't risk a word to a man whose breath told the whole story — namely that his judgments were already rotted and his wits reversed by regular systematic doses of frogjuice. Lonely? I guess I understand that word today. But, then, what is a man's life if there's no one thing in it more important than all other things? It's a flat life with no peak in sight, and that's the truth.

In the next few days I converted a lot of property to cash, and it was difficult work. Still, as long as I saw I could do it by myself, I saw no reason to trouble my neighbors about it and torment them with panic. There would be a few, maybe, who would call me a glory-hog afterwards, but I knew most of them would be glad just to have contributed. By a week after the Widdles Farm massacre, I had all the resources necessary, and was ready for action.

I snuck out when it was full dark, leaving the light on in my place to keep the frog there, thinking he was tormenting me. I hurried down-gulch to my equipment cache near the Gulch Reservoir Dam, which I decorated with sufficient dynamite to convert that frog into a fine green fog stretch-

ing over this and the six neighboring counties.

Now another man, a perfectly good man, might have planned no further, might have set up his detonator on the hilltop nearby, sat down, whipped out his infrareds and waited for that frog to swim out and settle himself into the reservoir.

But, then, what would have happened when three million cubic feet of water rolled a mile and a half down the gulch and through Gulch Town, which stood at its foot? I can assure you that I kept this in mind and took the vital added precaution of rigging both sides of the Narrows, a half mile below the dam, as well as the dam itself. Then I sat down on the hill with my pair of detonators and waited.

It was a good hour later when my infrareds picked him up. He was nothing more than a movement in the reeds but the cynicism, the *swagger* of that movement was unmistakable. Then he was a rippling, slow and steady, moving out to the center of the reservoir.

It took every ounce of my strength to wait as he sank himself into that poor lost lake's pure (or *once-pure!*) and tender fluids. Wait I did, and watch, determined to let that frog settle into her very bull's-eye, let him get into the deepest prime of his sin with all his flags flying and his pants dropped round his ankles then *whap* — explode him straight out of his socks and into the nastiest, hottest part of hell. Deeper and deeper he swam. I clench-

ed my teeth, hung on — a little farther, a little farther — I groaned and jammed down both plungers. The charge blew.

The dam bellied out like a huge bubble and crumbled away as I heard a big flat shockwave. The water, like an enormous slug, had just begun to move down the gulch when the noise of the Narrows charge reached me, and I turned the infrareds to see where, just as I had planned, the sides of the gulch had caved in together, creating a natural earth dam which would prevent the Gulch Dam Reservoir from reaching Gulch Town.

It was raining spray on me as that black water snaked down, faster and faster, towards the Narrows. The reservoir was a big empty, shiny bowl in the moonlight when the water hit them.

The right side of my earth dam worked like a charm. It stood solid and square, as planned. The left side, on the other hand, did very poorly. It might as well have been a nickel's worth of gumdrops for all the resistance it put up. The water just punched straight through it, like a fist two hundred feet thick, and wormed on down, faster and faster, to the town.

I ran top-speed over the hills, through the drizzle of the lake that still fell over everything. I reached the outskirts of the town with my 'thrower at the ready.

Three or four blocks of the upper-rent district, which stood on the high-

est ground, hadn't even been dampened. As for the rest of the town, you could have stood on the up-gulch side of it, and strapped on a pair of mud skis, and skied straight to the down-gulch side of it, enjoying a perfectly smooth ride, without encountering the slightest bump or irregularity in your path. I don't need to describe my feelings. They were what any normal-hearted man would feel, looking upon the grim tragedies that just one destruction-mad frog could bring down on an innocent population.

But you've got to let the dead bury themselves in times like these—it's the bitter truth. I hitched up my torch tanks and set off for the encampment of survivors. The mayor, in his bathrobe, was standing with a couple dozen of his neighbors, trying to calm them. Everybody was staring at the hills and dales of mud where the lower-rent district and civic center had been. As I approached them to report, I scanned around, hoping to find some piece of the enemy to illustrate my story. I didn't realize that I was just about to find something much more horrible than a *piece* of that frog.

The street lighting was out, and the survivors had got out kerosene lanterns, and that was why I had got just in speaking range of the mayor, before I realized the ugly truth. That frog, intact, eyeing me up and down with sarcasm, sat perched on the mayor's shoulder as cozy and confidential as a pet parrot. The mayor said something.

A lot of the people gathered behind him said things to me too. Seeing how things stood, of course, I ignored them. This was the big face-to-face, and my mind was more concentrated than I've ever known it. I set my 'thrower to *ash*, and I spoke my mind to that frog:

"Mr. Frog," I said, "you and me have been through a lot together, and now we face a desperate situation. We've got seven thousand, four hundred and eight tragic casualties behind us, men, women and hogs, not to mention extensive property damages. My own position is open to trumped-up charges. I say to you, beware the wrath of a patient man stirred-up. The sneer is about to be worn on the other side."

But I did not fire yet. I did not fire because that frog answered me. He began to croak, a slimy cold sound like a door being secretly opened behind you. He began to croak, and I understood that croak to the tiniest syllable. He said:

"Mr. Morsel, now you have woke me up. I was just loafing and nibbling before. Now I'm wide awake. Now I'm hungry and horny in dead seriousness." That frog's eyes were glassy black holes on turrets — to look at him was like staring into a pair of 75 mm muzzles as they swiveled independently, taking two different aims on me. He said:

"Imagine every crime, every foulness, rottenness, meanness, every rap-

ing, bugging and murder that you can. Well, ten times that is what I'll have for breakfast, and I plan to start lunch immediately afterwards. Evil? Your wildest dreams wouldn't get close. I have a million times your imagination and I do absolutely everything that comes to mind. What I don't leave dead, you'll kill out of common decency. You've heard them say that someone has to do it, Mr. Morsel? Well, they mean me."

I fired then, breaking out of the spell of that frog's voice — but I wasn't really hoping. I knew now what I was up against, and I fired only to let him know that I was his eternal enemy, not because I believed any more that just one man alone could stop that frog. And sure enough, when the mayor's and the crowd's ash was still settling down — *plop*, he landed with a puff of grey dust in the midst of their remains. He leered, just showing me he was still alive — he croaked once and sprang off.

Dear friends of the city, that is the gist. That frog seems temporarily pulled back — there's been a let-up of ruin

and chaos. We've used that time, and now our organization needs your help. I haven't written this to idly beat my drum for the noise of it. I and my colleagues are in need of personnel and semi-skilleds that can only come from you, our fellow citizens. Luck has given us this one day to pull our pants up, so to speak, and we can't sit down on the job.

Many of you will speak against tomorrow's bombing even after they have read this. Alas, but there's no way around this. Tragically, we now know that that frog has reached the water supply of the capital, and those of you who take this attitude are his unlucky victims who have drunk to excess.

Evacuation instructions will be broadcast tonight over all networks. Our recruitment stands will be found along all evacuation routes, to be outlined in the broadcasts. Our mission cannot be answerable for any individuals remaining in the city past dawn. Yours in duty,

Fluke Whatley, Col.

First Anti-Frog Armored





Science

ISAAC ASIMOV

Drawing by Gahan Wilson

CHANGE OF TIME AND STATES

In our time-bound society, we expect things to happen regularly, and in accordance with the insistence of the calendar and wrist-watch.

I belong, for instance, to a group that meets regularly each Tuesday for lunch, and a couple of weeks ago, there were comments made concerning the fact that a particular member had missed a few meetings. The errant member advanced excuses which were dismissed as insufficient in a more or less good-natured way.

At which I saw a chance of advancing both my virtue and my reputation for gallantry by saying, "The only time *I* would miss a meeting would be if the young lady in bed with me simply *refused* to let me leave."

Whereupon one of the gentlemen at the table promptly said, "Which accounts for Isaac's perfect attendance record," and I was wiped out.

The laughter at my expense was unanimous, for even I had to laugh.

Regularity has always been valued, even before the day of clocks. Something that happened when it was supposed to happen offered no shocks, no possibilities of unpleasant surprises.

The planets, which *seem* to move erratically against the backgrounds of the stars, were carefully studied until those movements were reduced to rule and could be predicted. That was the justification of ancient astronomy, since by knowing how the various planetary positions would relate to each other, astronomers could judge in advance their influence on the Earth, and thus predict events. (We call that sort of thing astrology now, but never mind.)

But then, every once in a while there came along a comet, appearing from nowhere, vanishing into nowhere. There was no way of predicting its coming and going, and it could only be taken as a warning from above that something unusual was about to happen.

Thus, at the very start of *Henry VI, Part One*, English nobles are standing round the bier of the conquering Henry V, and Shakespeare has the Duke of Bedford intone:

*Hung be the heavens with black, yield day to night!
Comets, importing change of time and states,
Brandish your crystal tresses in the sky,
And with them scourge the bad revolting stars
That have consented unto Henry's death!*

In other words, the presence of a comet in the sky means that the conditions of life (time) and national and international affairs (states) will change.

In 1705, the English astronomer, Edmund Halley, insisted that comets were regular phenomena, circling the Sun as the planets did, but in highly elliptical orbits so that they were only seen near the time of their perihelia when they were close to the Sun and the Earth.

The comet whose orbit he calculated and whose return he predicted has been known, ever since, as "Halley's Comet," or, in line with recent habit, "Comet Halley." It *did* return as predicted, and then twice more. Now, in 1986, we expect it still again.

The taming and regularization of comets has not, however, altered the expectations of the unsophisticated. Each time Comet Halley returns (or each time any other comet shows up spectacularly, for that matter) there is fright and panic. After all, just because Comet Halley returns periodically, and just because its return is expected and predicted, doesn't mean that it won't bring on something important and probably uncomfortable. Maybe such events are scheduled, by Providence, in an orderly and periodic manner.

Let's see, then —

Comet Halley completes one revolution about the Sun in 76 years or so. The period of revolution is not quite fixed because the comet is subject to the gravitational pull of the planets it passes (particularly to the pull of giant Jupiter). Since at each passage toward the Sun and then, again, away from it, the planets are at different spots in their orbits, the pattern of gravitational pull is never quite the same, twice running. The period can therefore be as short as 74 years, or as long as 79 years.

The earliest report of a comet that seems to have been Comet Halley came in 467 B.C. Counting that appearance, Comet Halley has now been in the sky thirty-two times in the last twenty-four and a half centuries. In 1986, there will be a thirty-third appearance.

We could run through them, and see what "changes of time and states" have taken place with each appearance — if any.

1 — 467 B.C. — Persians and Greeks have been fighting for a generation and Comet Halley now gleams in the sky to mark the end. In 466, the Athenian navy defeats the Persians in a great battle off the coast of Asia Minor and the long war is over. Comet Halley also marks a beginning, for in that same year, the democratic party wins control of Athens, and that city begins its golden age — perhaps the greatest flowering of genius in one small area over one short period the world has ever seen.

2 — 391 B.C. — The city of Rome in central Italy was very slowly becoming more important. It had been founded in 753 B.C., and had become a republic in 509 B.C. It had been gradually establishing its domination over the neighboring towns in Latium and Etruria. Then came Comet Halley in the sky, and with it the barbarian Gauls from the north. In 390 B.C., the Gauls defeated the Romans north of the city and swept in to occupy Rome itself. The Gauls were finally bought off but the Romans were badly shaken. Apparently, though, it put them into a no-nonsense mood, for after the occupation they moved toward greatness much more rapidly than before.

3 — 315 B.C. — Between 334 B.C. and his death in 323 B.C., Alexander the Great had swooped like a raging fire over western Asia, conquering the vast Persian Empire in a series of incredible victories. Alexander's Empire, however, wasn't permanent, but fell apart immediately after his death as his generals quarreled over the fragments. With Comet Halley shining down, it became clear that there was no chance of the Empire being reunited. Antigonos Monophthalmos, who was the one general who was unwilling to settle for less than all, was defeated in 312 B.C., and though he strug-

gled on for another dozen years, it was clear that the Empire had been fragmented into the three major Hellenistic kingdoms: Egypt under the Ptolemies, Asia under the Seleucids, and Macedonia under the Antigonids.

4 — 240 B.C. — The Hellenistic kingdoms fought each other continually, with no clearcut victory for any one of them, merely a steadily increasing overall exhaustion. By 240 B.C., when Comet Halley was once again in the sky, it was clear that the Hellenistic kingdoms were declining and that other nations were on the rise. About 240 B.C., Arsaces I was establishing his power in Parthia, an eastern province of what had once been the Persian Empire. What's more, in 241 B.C., Rome, which controlled all of Italy, had defeated Carthage (which controlled north Africa) in the First Punic War. Rome was now dominant in the western Mediterranean. Comet Halley thus marked the rise of powers east and west which, between them, would destroy the Hellenistic kingdoms.

5 — 163 B.C. — When Comet Halley returned, it was to mark the fact that Rome had defeated Carthage a second time in 201 B.C. and had gone on to destroy Macedonia and reduce the Seleucid kingdom and the Ptolemies of Egypt to puppets. Rome had just established a clear dominance over the whole Mediterranean by 163 B.C. and was entering its greatest period. Meanwhile, in Judea, a small province of the Seleucid kingdom, the Jews had risen in revolt. A combination of inspired leadership by Judas Maccabeus and internal squabbling among the Seleucid royal family, led to Jewish control of Jerusalem in 165 B.C. Comet Halley blazed, then, over a newly Roman Mediterranean and a newly Jewish Judea, and the time would come when they would interact with important consequences.

6 — 87 B.C. The Roman governmental system, which had suited a small city fighting for control of a province, was breaking down under the stresses of attempting to govern a large empire of diverse peoples, languages and customs. Internal infighting between Roman politicians grew steadily more deadly, especially since each side tended to be backed by one general or another, so that political quarrels degenerated into civil war. The general, Marius, favored the democratic side; the general, Sulla, the aristocratic side. In 87 B.C., Comet Halley returned and illuminated a crucial moment, for in that year, Sulla and his army forced its way into the city of Rome and slaughtered some of the more radical politicians. It was not the Gauls who occupied Rome this time, but a Roman general. The portent of Comet Halley was clear. No external enemy might be able to stand up to Rome, but Rome would be torn apart by divisions within.

7 — 12 B.C. — Comet Halley returned to find that Rome had fought its

way through a whole series of civil wars and had survived and had even expanded and grown stronger. It had become the Roman Empire, and under its first emperor, Augustus, it lay in profound peace except for local fighting along its northern borders. Somewhere about this time, Jesus is supposed to have been born in Bethlehem. The exact year of his birth is not known, but some people think it may have been 12 B.C. and maintain that Comet Halley is the "star of Bethlehem." If so, Comet Halley imported a change at this appearance that, to many people, was the central change of history.

8 — 66 — The Roman Empire was still largely at peace at Comet Halley's next return and was ruled by Nero. One area of discontent was Judea, however. It dreamed of a Messiah and wished to emulate the old Maccabean fight and free itself of Rome. In 66, with Comet Halley overhead, Judea broke into revolt. It was defeated in a bloody four-year struggle. Jerusalem was sacked and the Temple destroyed. The fate of a small province didn't seem to matter much, but the new group of Christians had held aloof from the struggle, and it lost all standing with Jews in consequence. This meant the Christians were no longer a Jewish sect, but became an independent religion of increasingly Graeco-Roman cultural content, and this, in turn, had a profound effect on future history.

9 — 141 — The Roman Empire, by the next return of Comet Halley, had lived through a plateau of peace and prosperity climaxed by the almost eventless reign of Antoninus Pius, who became Emperor in 138. Comet Halley now shone down on the culmination of Mediterranean history. All the struggles of the Greeks and Romans among themselves and with others had ended with the Mediterranean world united under an enlightened and civilized government. It was something the region had never seen before and would never see again. Comet Halley marked that climax. The upward climb had ceased, the downward slide would begin.

10 — 218 — The happy period of the good Emperors was long gone by the next return. After some disorders, Septimius Severus placed the Empire under strong rule again. In 217, however, his son, Caracalla was assassinated, and Comet Halley shone down upon the beginning of a long period of anarchy during which the Empire nearly went under. Comet Halley had presided over the peak on its previous appearance, and now it marked the beginning of a trough.

11 — 295 — The period of anarchy came to an end in 284 with the coming to power of Diocletian, the first strong Emperor to have a fairly long and stable reign since Septimius Severus. Diocletian set about reorganizing

the Imperial government and made it into an Oriental monarchy. The vestigial remnants of old Rome disappeared, and in 295 Comet Halley was presiding over the coming of a revised Empire in which, from now on, the eastern half would be dominant. It was almost like a return to Hellenistic times.

12 — 374 — The reforms of Diocletian kept the Roman Empire going, but the relief was only temporary and time was running out when Comet Halley was in the sky again. The Huns were on the march, pouring out of Asia and across the Ukrainian steppes, driving the Goths (a Germanic tribe) before them. In 376, some of the Goths, seeking refuge, crossed the Danube into Roman territory. The Romans mistreated them, and, in 378, the Roman legions were defeated and destroyed by the Gothic cavalry at the Battle of Adrianople. A new age had dawned, and cavalry would dominate the battlefield for a thousand years. Comet Halley was presiding over the fall of the old Roman Empire and the rise of the German tribes.

13 — 451 — By the time Comet Halley returned again, several of the western provinces of the Roman Empire were under the direct control of German warlords, and the Huns were stronger than ever. Under their ruler, Attila, a Hunnic Empire, stretching from the Caspian Sea to the Rhine River, existed. In 451, with Comet Halley in the sky, Attila penetrated into Gaul, the farthest westward any of the central Asian nomads were to penetrate either before or after. At the battle of Chalons, however, combined Roman and German forces fought Attila to a standstill. Two years later, he died and the Hunnic Empire fell apart. Comet Halley thus presided over the cresting of the central-Asian flood.

14 — 530 — By the time Comet Halley returned, the Roman Empire in the west had fallen and the provinces were all German controlled. The greatest of the new leaders was Theodoric the Ostrogoth, who ruled Italy in enlightened fashion and labored to preserve Roman culture. However, Theodoric died in 526, and the next year Justinian I became the East Roman Emperor. Justinian planned to reconquer the west and, in 533, his general, Belisarius, sailed west to begin a process that devastated Italy, destroyed the Ostrogoths, yet did *not* really restore the Empire. The west was left to the untouched Franks, the most barbarous of the Germanic tribes. In this way, Comet Halley shone down on the beginning of the campaigns that established the Dark Age.

15 — 607 — The Roman Empire in the east remained strong and intact, but in 607, as Comet Halley shone in the sky, the Persians, under Chosroes II, began their last and most successful war against the Romans. At

the same time, in Arabia, a young merchant named Muhammad was developing a new religion based on his version of Judaism and Christianity. The Persian-Roman war succeeded in utterly exhausting both combatants, and the new religion would take over all of the Persian Empire and more than half of the Eastern Roman Empire against much-diminished capacity for resistance. Thus, Comet Halley presided over the beginning of Islam and of a newly-shrunk remnant of the Roman Empire, now called the "Byzantine Empire."

16 — 684 — In an amazing sweep of success, the Arabic followers of Islam surged out of Arabia following the death of Muhammed and took over Persia, Babylonia, Syria, Egypt and North Africa. They were ready now to take over Constantinople itself, then sweep through Europe and consolidate their hold on the entire western world. They laid siege to Constantinople even as the barbarian Bulgars swept down the Balkans to approach the city from the land side. Constantinople held, however, defeating the Arabs with Greek fire in 677. In 685, after Comet Halley had appeared, the throne passed to Justinian II, a cruel but energetic ruler who defeated the Bulgars. Comet Halley presided over the survival of the Byzantine Empire as the shield of Europe against Islam.

17 — 760 — Islam continued to expand in lesser ways and took Spain, for instance, in 711. In 750, the Abbassid Caliphate was established, with its capital at Baghdad, and it ruled over all of Islam except for Spain and Morocco. By 760, with Comet Halley in the sky, the Caliphate was firmly established, and, for a period of time, Islam was at its peak, peaceful, united, and powerful beyond challenge. As Comet Halley had shone down upon the peak of the Roman Empire eight appearances ago, it now shone down upon that of the Islamic Empire.

18 — 837 — In the west, the Frankish Empire reached its peak under Charlemagne, who had died in 814. His successor, Louis the Pious, reigned over an intact Empire, but he was weak and had four sons among whom he intended to divide the realm. There were civil wars over the matter, but in 838, the final plan for division was concluded. Comet Halley thus presided over a division that was never to be healed, and the history of Europe forever after was that of a multiplicity of ever-warring nations. What's more, Comet Halley's appearance heralded new invasions from without. The Vikings from the north launched their most dangerous raids soon after 837, as did the Magyars from the east, while the Arabs from north Africa were invading Sicily and launching incursions into Italy.

19 — 912 — The last major incursion of Viking forces into Frankish ter-

ritory was that of the Northmen, or "Normans" under Hrolf. In 912, with Comet Halley in the sky, Rollo accepted Christianity and was awarded a section of the Channel coast to rule. The region has been called "Normandy" ever since. Thus, Comet Halley presided over the birth of a new state which was to play an important role indeed in European history.

20 — 989 — Comet Halley, on its return, presided over the shaping of modern Europe. The descendants of Charlemagne had come to their final end, and in what is now called France, a new line, in the person of Hugh Capet, came to the throne in 987. His descendants ruled for nine centuries. In 989, Prince Vladimir of Kiev was converted to Christianity and this introduced the appearance of Russia as a European nation. Comet Halley was presiding over the end of the Dark Age as it had presided over the beginning six appearances ago.

21 — 1066 — Normandy, which was formed two appearances ago, had by now become the best-governed and most powerful realm in western Europe under its extremely capable Duke William. Normans had already drifted to the Mediterranean where they took over Sicily and southern Italy. William, however, planned an invasion of England, just across the Channel. Comet Halley appeared even as his fleet was being prepared, and before the year was over, he had won the key Battle of Hastings and had become William the Conqueror. Comet Halley thus saw the formation of a Norman England which, in time, was to outdo both Rome and Islam.

22 — 1145 — Reviving Europe attempted its first general offensive against the non-European world in 1096, when armies poured eastward in a Crusade to retake Jerusalem. The armies were ill-organized, ill-equipped, ill-led, but they were full of the valor of ignorance, and they faced a fragmented enemy. They took Jerusalem in 1099 and established Christian kingdoms in the Holy Land. Slowly, however, Islam rallied against the invader and, in 1144, scored their first major success when they retook Edessa in the northeastern corner of the European conquest. Comet Halley shone down upon calls for a Second Crusade which, however, was to prove a fiasco. The Crusading movement continued, but in the long run it failed, and the appearance of Comet Halley marks virtually the exact moment when that failure became evident.

23 — 1222 — Europe was not yet ready, by any means, to rule the world. As Comet Halley returned, a new menace from Asia had arisen that, for a while, was greater than any that had preceded it or was to follow it. In 1162, a Mongol named Temujin had been born. By 1206, he ruled the tribes of central Asia under the name of Genghis Khan. He forged them in-

to a fighting army trained in brilliant new tactics that capitalized on mobility, surprise, and relentless shock. In a dozen years, he took northern China and swept across western Asia. In 1222, with Comet Halley in the sky, a Mongol army made its first appearance in Europe, and the next year that army inflicted a resounding defeat on the Russians. The Mongols then left, but they were to return. Comet Halley presided over the beginning of the disaster.

24 — 1301 — The Mongols came again and won victory after victory, but retired, undefeated, to elect a new monarch. Russia remained in their grasp and its entire future history was distorted as a result. When Comet Halley returned, that episode was over, and other significant events were taking place. The European knights, who had ruled the battlefield for centuries, rode against the rebelling burghers of Flanders. The knights were filled with contempt for the low-born varlets. The low-born varlets, however, had pikes and chose their ground well. They destroyed the French horsemen at the Battle of Courtrai in 1302. Meanwhile Pope Boniface VIII capped the increasing power of the Papacy by laying claim in 1302 to supreme rule over the kings of Christendom. Philip IV of France thought otherwise and sent agents to manhandle the Pope (who soon died) and then established a Papacy that served as a French puppet. Thus, Comet Halley, on this appearance, presided over the beginning of the end of the feudal army, and of the all-powerful Papacy as well, and, therefore, over the beginning of the end of the Middle Ages.

25 — 1378 — After Boniface VIII, the Papacy was established in Avignon, a city in southeastern France. In 1378, with Comet Halley again in the sky, a Pope re-established himself in Rome. The French cardinals, however, unwilling to leave Avignon, selected a Pope of their own. This started the "Great Schism," which lasted for forty years, and which provided Europe with the spectacle of rival popes anathematizing and excommunicating each other, while nations chose sides according to their secular interests. The prestige of the Papacy was diminished, and the groundwork was laid for changes that would forever destroy the religious unity of Europe, as the political unity had been destroyed seven appearances ago.

26 — 1456 — When Comet Halley reappeared, it was to find that the Ottoman Turks were now the cutting edge of Islam. Since 1300, they had been expanding their power in Asia Minor, and in 1352 they made their first appearance on the European side of the Hellespont. In 1453, they took Constantinople itself, thus putting an end to the Roman dominions 22 centuries after the founding of Rome. In 1456, with Comet Halley in the sky,

the Ottoman Turks took Athens and laid siege to Belgrade. Western Europe was well aware of the new threat from Asia that Comet Halley heralded.

27 — 1531 — The Ottoman Empire reached its peak under Suleiman the Magnificent, who conquered Hungary and who, in 1529, laid siege to Vienna. Vienna held out, however, and the Ottoman Turks retreated to Budapest. Meanwhile, Columbus had discovered the American continents and, as Comet Halley shown down on the newly-liberated Vienna, Spanish conquistadores, having conquered the Aztecs of Mexico, were leaving for Peru, where they destroyed the Inca Empire within two years. Thus, Comet Halley presided over a Europe that had managed to stop the Ottoman advance and, at the same time, to establish itself far across the ocean. Europe was on the threshold of world-domination.

28 — 1607 — In 1607, at the return of Comet Halley, a group of Englishmen founded Jamestown in a region they call Virginia. It was to be the first permanent English colony established on the eastern cost of North America, and it was the start of a series of developments that ended with the establishment of the United States of America, which in days to come, would dominate Europe for a period of time.

29 — 1682 — With Comet Halley again in the sky, Fedor III of Russia died, and was succeeded by his two sons as co-Emperors. The younger was Peter I, who, in time to come, would be called "Peter the Great," and would, with titanic energy, drag Russia out of the twilight of its Mongol-dominated past, and into the sunlight of western European advance. Russia would remain western in orientation and, as a result of Peter's labors, would someday dispute the world with the United States.

30 — 1759 — Europe dominated the world by the next return of Comet Halley, but which European nation would have the lion's share? Spain and Portugal were first off the mark, but they had decayed. The Netherlands had made a valiant try, but it was too small. England (now Great Britain) and France were the remaining candidates, and, in 1756, the decisive "Seven Years War" between them started. (Prussia, Austria and Russia also participated.) The turning point came in 1759 when, with Comet Halley in the sky, Great Britain took Canada, gained control of India, and proved itself undisputed master of the seas. Comet Halley shone down upon the true foundation of the British Empire which would dominate the rest of the globe for nearly two centuries.

31 — 1835 — Great Britain, world leader, was changing peacefully by the next return of Comet Halley. In 1832, a reform bill was forced through Parliament that rationalized representation in that body, extending the

electorate and beginning the process of broadening the franchise to the population generally. Victoria reached the throne in 1837. In the United States, the first whiff of a split between North and South came with the nullification crisis of 1832, which was eventually resolved in favor of the Union. The battle lines were drawn, however, and in the end, the franchise would be extended to the freed slaves. In both nations, movement toward equalitarian doctrine took a firm course forward, with Comet Halley in the sky.

32 — 1910 — Edward VII of Great Britain, oldest son of Queen Victoria, died in 1910, and at his funeral there was an outpouring of the crowned heads of Europe for the last time. In 1914, World War I was to begin. It would destroy many of the ancient monarchies, and establish a new and more dangerous world. Once again, Comet Halley was importing the change of time and states.

33 — 1986 — ?

Impressive, isn't it? Maybe there's something to astrology after all.

No, there isn't. This is just a tribute (if you'll excuse the immodesty) to my ingenuity. Give me any list of 33 dates from 700 B.C. on, spaced regularly or irregularly, and give me a little time to think, and I will undertake to draw up a similar list of crucial events, sounding just as good. Given fifty such lists (especially if we include Oriental history, technological advance, cultural events and so on), it would be easy to set up fifty interpretations and it would be hard to choose a particular one as best.

Human history is sufficiently rich, and the currents sufficiently full of branch-points to make this possible, and that is one of the reasons why my imaginary science of psychohistory is going to be so hard to develop.

ANSWER TO MARCH ACROSTIC

Quotation: He sometimes felt it got in his way. People expected him to be neurotic when he wasn't. Not more so than others were, anyway. On the other hand, people sometimes got out of his way for just that reason, without his having to lift a hand. Matters evened out, perhaps.

Author and work: Isaac Asimov, FANTASTIC VOYAGE.

Nick Yermakov, "The Orpheus Implant" (February 1981),
returns with a new story about the ultimate gadget junkie....

The ECM War

BY
NICHOLAS YERMAKOV

Something had attacked Officer Kowalski. He had no idea what it was. It was invisible. He sat, dumfounded, behind the wheel of his squadcar, staring at his radar unit. It would never work again. It was supposed to be infallible. The newest Kustom HR-15 speedgun, with its detachable mount, sat on his dashboard, fused into a lump of uselessness. He anxiously scanned the traffic passing before him on the freeway, knowing somehow that the perpetrator was out there, within reach. He didn't know how his unit had been detected and defeated, but chances were that whoever it was now felt secure and wouldn't bother dropping his or her speed. They didn't know about the VASCAR unit in Kowalski's squadcar. VASCAR, an acronym for "Visual Average Speed Computer and Recorder," a simple time and distance computer, would en-

able him to measure the time it took for the offending speedster to pass the freeway overpass, and he would be able to feed that information into the unit to determine just how fast the perpetrator had been going to cover that distance in that amount of time. His radar was out of commission, but Kowalski hadn't lost yet.

There! The red sports car. Kowalski smiled. Now he had him! One hundred and ten miles per hour. No problem. His squadcar, which had been ported and polished, blueprinted and turbocharged, would catch the creep in no time. Then he'd find out just how his radar had been beaten. He turned the key in his ignition, smiling with anticipation of the chase. And ... nothing. The car refused to start.

Minutes later, Officer Kowalski discovered that his radio was out of action. Much later, during the mechani-

cal autopsy conducted on the moribund Plymouth, it was discovered that every single electrical component in the squadcar had been rendered useless. Radar detectors were one thing, *this* phenomenon had the Arizona State Police worried.

The ORBIS system was very expensive, and the Pennsylvania Highway Patrol were still experimenting with it. With costs ranging from ten to twenty-seven thousand dollars, dependent upon options, the department was hesitant to commit itself to widespread use. However, there was no question of the system's effectiveness. With sensors buried in the pavement, the units could pinpoint a speeder and take a picture of his car, using infra-red film and special polarizing filters. Not only would the driver's face be identifiable, but the date and time of the violation, as well as the posted speed limit and the violator's speed would be recorded. It was then a simple matter to mail a phototicket to the speeder's home address, which meant a great reduction in the amount of manpower required for effective traffic control. Early results had been extremely promising.

John Warden took a seat at the long table and nervously lit a cigarette. He had been one of the prime movers and shakers responsible for the department's implementation of the ORBIS system. For the past two months, he had been the commissioner's fair-

haired boy. ORBIS had worked so well that the traffic-flow speed had been reduced in no time, and the news media, while warning the motorist, with tongue-in-cheek, to watch out for Big Brother, had not neglected to mention how the system had left a greater number of patrolmen free to pursue other, more pressing duties. It was way past time for the police to receive some favorable publicity. However, in the last few weeks, that had all evaporated.

The ORBIS system, for no apparent reason, had gone haywire. Hundreds of motorists were receiving summonses to appear in court, the vast majority of them claiming innocence. The courts were backlogged hopelessly, and even a cursory examination of the situation led one to the conclusion that it was simply impossible for there to be that many violators. Even during an enforced "quota system," the traffic cops had been unable to hand out so many tickets. To do so, an officer would have had to literally stop almost every single passing motorist. It was inconceivable. Clearly, something had gone wrong with the computer. They had tried to keep it quiet, but there was no way to put a lid on such an epidemic. There was a public outcry, and the news media were having a field day at the expense of the department. John Warden had a migraine.

The men all rose to their feet as the commissioner entered. Accompanying him was a nattily dressed civilian with a briefcase. That would be Smythe, the

troubleshooter. Warden had the sinking feeling that the ax was about to fall.

"Take your seats, please, gentlemen," Commissioner Johnson said. "Some of you know Dr. Irving Smythe. For the benefit of those of you who don't, Dr. Smythe is here at the governor's personal invitation. He has kindly agreed to take some time out from his busy teaching schedule at MIT to come down here and help us with our ... problem. Dr. Smythe has been very busy these last two weeks, not only checking out our system, but examining the information we've compiled, thanks to the crisis center I set up last month. As you may or may not know, ours is not an isolated incident. I think Dr. Smythe can fill you in on the details better than I can. Dr. Smythe?"

The man cleared his throat and scratched absently at his rather longish black hair. He gave his head a nervous toss, sniffing and flaring his nostrils, reminding Warden of a nervous race horse.

"I'll try to keep it very simple, in laymen's language. This has been a most intriguing project. I'm afraid that I can't give you all the answers, but I can tell you that the root of the problem does not lie with the computer. So far as I have been able to determine, the computer itself is not at fault. Neither is the ORBIS system itself, in a manner of speaking. Let me try and put it in the most elementary

terms I can. Are any of you gentlemen familiar with the phrase GIGO?"

"Isn't that computer language?" Warden asked, feeling slightly relieved. "Garbage something?"

Smythe smiled. "You have the general idea. It stands for Garbage In, Garbage Out. What that means is very simple. These days, it's very fashionable to blame computers for just about everything. I'm sure every one of you in this room has, at one time or another, cursed out a computer due to some billing error or something, am I not right?"

A number of the men smiled, one or two chuckled.

"The phrase has to do with the human-error factor," Smythe said. "A computer is only a machine. It does not reason. At least, not yet, anyway." There was some laughter. "If a computer is improperly programmed, it will give forth improper results. You put garbage into the computer, you get garbage out. Well, essentially, this is what we have here. However, the fault does not lie with human error, as in most cases of this kind. As you know, I've worked closely with Joe Williams, who helped set up the ORBIS system here, and we've come up with some interesting results. It seems that the 'garbage' going into the computer has been coming, not from any human agency, but from ORBIS itself."

Warden tensed in his chair.

"Somehow," said Dr. Smythe. "the ORBIS sensors are malfunctioning or

being *caused* to malfunction. What I am about to offer, gentlemen, is only a theory at this stage, but I simply can't find any other explanation. Actually, I find it fascinating. It's my educated guess that there is a device which, installed in a vehicle, projects an inductive electromagnetic field onto the road surface either below or just ahead of it. When this field reaches an ORBIS sensor, it triggers it and causes the sensor to relay a signal that somehow shorts out the system, resulting in photographs being taken of literally every vehicle in the vicinity. Naturally, the speeding vehicle is being photographed, but so is every other vehicle as well. The system is literally taking pictures of everything on the road, and your computer is sending out tickets to half the population of the area. In short, gentlemen, someone has discovered a way to sabotage the system."

"That's impossible," said Warden. "There's no such device on the market."

"Quite true," agreed Smythe. "Nor has any such device been mentioned in any periodical or published paper, at least not to my knowledge. Allow me to add yet another element to the equation. There is, to my certain knowledge, a device available that is a refinement on the commercial radar detectors. Your Fuzzbusters and what have you. This particular device not only identifies a radar frequency and alerts the operator to the presence of

police radar, but it *tracks* the signal, pinpoints it and sends back a micropulse that affects the sending unit."

"You mean, like a jammer?" asked one of the men.

"The principle is the same," said Smythe. "It's similar to the ECM, Electronic Counter Measures used for jet fighters. The ECM detects enemy radar, pinpoints the location of the transmitter and sends a missile homing in. This is a somewhat more benevolent system. You don't have to worry about your squadcars being blown up. This device sends back a micropulse that fuses the radar unit, effectively neutralizing it. *And*, if that unit happens to be powered by the squadcar, plugged in via cigarette-lighter jack, for example, or permanently wired in, that same pulse knocks out all the electrical components in the squadcar. Quite ingenious. I wish I knew how it was done."

"Let me get this straight," said Warden. "You mean that there's somebody out there who is capable of manufacturing an ECM system that not only defeats ORBIS but radar *as well*?"

"Well, no, that isn't what I meant," replied Smythe. "ORBIS and radar function on two completely different principles. It couldn't be *one* device. But, yes, someone has invented something that can knock out radar *and* something else that can neutralize ORBIS. One is an active ECM system, the other one is passive."

"You think the two are connected? That it's the same people putting out both devices?"

"I'm only guessing," said Smythe, "but, yes, I would say so. What I find interesting about this case is that the commercial potential for either device is staggering. There is an immense profit to be made in print, nor has it been offered to any corporation for marketing. I checked and learned that there is no patent on file for either device. That's what really puzzles me. It's the only real common denominator, but it makes no sense. Why would someone invent two such devices and put in all the work that goes along with that and not bother to capitalize on them? Why keep it secret?"

"Well, for one thing," said Warden, "even if that's true, and I'm not saying that it is, yet, it would be illegal. We couldn't have motorists—"

"You missed my point," interrupted Smythe, impatiently. "You're thinking too small. The government would buy the patents on both devices in a second. Think of the implications! Utilizing that same principle, we could have the perfect antiballistic missile system! We could turn nuclear warheads into duds! We could conceivably knock out the satellites of foreign powers. Render inoperable entire communications systems!"

"Jesus H. Christ!" breathed Warden.

"My sentiments exactly," said Smythe. "In fact, although I did not

tell the commissioner, for fear of sounding foolish at the time, yesterday I became convinced enough of my findings to forward them to Washington."

"Washington!" Exclaimed the commissioner. "Doctor, are you sure about all this? I mean, knocking out *satellites*?"

The phone rang. The commissioner picked it up. He said, "Yes." Then he said it several more times. Then he grew pale and his eyes widened. The last time he said "Yes," it was little more than a croak.

"Gentlemen," he said, his voice unsteady, "that was Mr... uh, a gentleman from the National Security Agency. It seems that the discussion we have just had in this room has been classified Top Secret. None of us are to leave this room until further notice. I am told that we can expect the arrival of agents from Central Intelligence within the hour."

The initial steps taken by the agency did not prove feasible. Trying to compile a list of people who purchased separate components that could conceivably be used to assemble such devices resulted in a list of some sixteen million names. Impossible to conduct an investigation on so large a scale. To throw the general public off the scent, it was announced that the ORBIS system had been discontinued due to imperfections, while, in fact, it was kept

active in an effort to track down the culprits. It didn't seem to help much. Work continued.

Warden closed the door to the office and sat down. "You asked to see me, sir?"

The agent smiled. "You don't have to call me that, you know. My name is Ed Wheeler. Ed will do just fine."

"Okay. You know my first name. And a lot more, too, I'll wager."

Wheeler grinned. He was brown haired, of average height, average weight, average coloring and average features. He wore an average blue suit. He had on average black shoes. He was average. Except that he could put six thirty-eight slugs through the same hole in the target and he knew thirty-two ways to kill a man silently. And a lot more ways to kill him making noise.

"You might say that I've requisitioned you, John. For the duration, consider yourself working for the agency."

"Does that mean I have to sign a loyalty oath or something?" Warden asked, jokingly.

"I think we'll waive that requirement," answered Wheeler. "You've got a good record. Although I'm curious about one thing. Why did you object to saying the pledge of allegiance in the third grade?"

Warden stared at him. "I don't remember. Did I do that?"

Wheeler shrugged. "Never mind.

Just an idle question, really. All right, let me bring you up to date and tell you what you're going to be doing from now on. We've managed to learn something about the organization we're dealing with."

"Pardon me," said Warden, "did you say *organization*?"

"That's right," said the agent.

"I hope it isn't SPECTRE," said Warden.

"Hey, that's funny," said Wheeler, grinning. Warden noticed, for the first time, that the agent smiled only with his mouth. It was a practiced rictus. Totally unnatural. "Have you ever heard of the Phone Freaks?" he asked.

"Sure," Warden replied. "A bunch of gadget junkies who got their kicks figuring out ways to screw Ma Bell out of money. Came up with blue boxes, right? Their leader was somebody called Captain Crunch? I read about it in the papers when they caught him."

"That's the bunch," said Wheeler. "The people we're looking for are a similar crowd. They seem to be spread out all over the country, though there aren't that many of them. We estimate, at most, a hundred or so."

"How did you learn this?"

"We have our ways."

"I see."

"No, you don't. But that's all right. Never mind. We have established, at least, that they're not really a threat to national security. At least, not consciously. This is just a kick for them. A way of beating out the cops. They

haven't got the slightest idea what they've stumbled onto."

"Let me get this straight," said Warden. "You mean to tell me that Washington, the agency, whoever, is really convinced that this invention, this antiradar device—"

"The Copstopper."

"What?"

"The Copstopper. That's what they call it."

"Yeah. Right. Well, you mean that this ... Copstopper thing ... can actually be used to neutralize missiles? Knock out spy satellites and all that?"

"No, not in the way you think. Naturally, the device they're using is very crude. Effective, but crude. Washington is interested in the principle involved. Dr. Smythe's report was enough to get our people interested. Now they believe that there is a possibility, just a possibility, mind you, that the theoretical principles involved could be refined and utilized on a larger scale to do exactly what you said. We won't know for sure until we get our hands on one of the actual devices. That's where you come in."

"I'm afraid I don't understand."

"We believe that the headquarters for this group is right here in Pennsylvania. At least, we're relatively certain that the inventor of both devices, the Copstopper and the ORBIS device, can be found here. The ORBIS device has not been reported in use anywhere except this area. ORBIS is, at best, an impractical system not in use by most po-

lice agencies. The fact that its implementation here was given so much publicity leads us to believe that the unit was developed for use especially for this area. Also, the frequency of incidents with both devices is greater here than elsewhere. We have other information at our disposal, but that need not concern you. According to your military record, you showed remarkable proficiency in intelligence work. It suits our purposes to have someone not affiliated with the agency make the necessary arrests in this case."

"You don't want the publicity."

"We don't want any publicity regarding this case, but realistically speaking, the possibility of that is slim. It would be preferable to have the news media think that this was only a local, police matter."

"I see."

"We're not interested in breaking this organization. That's your territory. We only want the inventor of the Copstopper. We've managed to discover that this person has some small amount of status in certain underground circles. We would like to find this person before the subversive element is able to take full advantage of his unique talents."

Warden leaned forward. "You actually know who this is?"

"We only have an alias," the agent replied. "This individual is known by the C.B. style handle Dr. Road Runner. We expect to have more informa-

tion shortly. Meanwhile, we're arranging for you to make certain key arrests. With some educated plea-bargaining, I believe you'll have enough facts to initiate a covert infiltration of the Road Runners."

The noisy Harley-Davidson had made its last three a.m. arrival at the garage next-door. Its owner, a snotty teenager with a pony tail and a terminal case of acne, had taken a perfectly good motorcycle and ruined it. Once a stock factory model called the Super Glide, the bike now had its front removed, to be replaced by sixteen-inch extended front forks of the variety known as "the springer." Two hexagonal chrome-steel downtubes on either side of a spindly, sixteen-inch front wheel with no brake, the fork's springs were external and located near the top triple trees, behind the custom headlight bracket. The forks joined the front axle by means of two rockers, resulting in a "pogoing" sort of operation, vastly inferior to the factory glide forks with their internal springs. The rear swingarm assembly and shocks had been removed and a one-piece "hardtail" section welded in their place, which dropped the bike considerably lower to the ground. It also gave it a rigid ride that played hell with the kidneys and lower spine, since there was now no rear suspension. With its outlandish "ape-hanger" handlebars mounted on four-inch risers, the machine now handled like a trac-

tor. George didn't really mind the phallic appearance and the custom seat and the garish paint job and the overabundance of chrome, although he thought it looked tacky. What really drove him crazy was the fact that the kid had removed the factory exhaust system and bolted on a set of after market pipes with no baffles. Now, you could hear the monster coming from over a mile away. It sounded like a Coast Guard cutter being torn in two by an iceberg. George was, himself, a motorcycle enthusiast, the proud owner of a stately BMW R100S. But he knew that the image presented by the kid next-door only served to aggravate the citizens and the police, which made it bad for *all* riders. Already, New York City had imposed a ban on nighttime use of motorcycles, precisely because of unmuffled monstrosities such as the chopper next-door. Both the EPA and the National Highway and Traffic Safety Administration were pushing for antibike legislation. The kid next-door had served as the catalyst for what George was about to do. He was tired of being wakened in the middle of the night.

George "Dr. Road Runner" O'Brien, dressed in faded blue jeans, Frye boots and a BMW tee-shirt, entered the upstairs bedroom carrying his newly constructed Noiseabater. It was a little bulky, about the size of a portable television set, but it was still a

prototype. It worked just fine in the laboratory he had set up in his basement, but this would be its first "field test." If it functioned as well as he thought it would, then he'd be able to work on making it smaller.

Opening the bedroom window, George propped the device in the frame as if it was an air-conditioning unit. He calibrated the tracking device, then checked to see that the triggering mechanism was set at eighty-five decibels, a level slightly above that allowed by the EPA. It was two thirty in the morning. George turned the Noise-abater on, lit up a cigarette and settled back to wait.

At three fifteen, John "Apache" Columbino turned his Harley chopper onto Poplar Street. It had been a good night. The Barbarians had partied righteously. The high school girls who had wandered into the clubhouse had really gotten into the spirit of things, and one of them got a little too drunk, allowing Animal to tattoo "U.S. Govt. Grade A Inspected Beef" on her left buttock. That had been a real howl. He wished he'd be able to see the expression on her mother's face when she saw that! Too freaking much!

The bike was weaving slightly. Apache had a buzz on. The angel dust had made him throw up most of the beer and pizza, but the Jack Daniels had taken the bad taste out of his mouth. Well, no problem. Just sack out on the ole mattress and watch the wallpaper squirm until oblivion came.

Halfway down the block, the engine quit. Apache cursed as the bike coasted over to the curb. He had just shifted into neutral and was blipping the throttle, preparatory to popping a monster wheelie in front of George O'Brien's house. He was tired of having that *touring* rider bugging him about putting mufflers on the bike. The guy was a real squirrel. Apache put the kickstand down and checked his gas tank. Nope. Plenty of gas, so the problem wasn't lack of go juice. And the petcocks were in the "on" position, both of them. He cursed again and labored to push the bike the rest of the way to his garage. Fortunately, he didn't have more than half a block to go. Apache only weighed one forty-five. The Harley was well over four hundred pounds, stripped.

In the garage, Apache turned the light on and grabbed a beer from the icebox he kept there. He lit up a Marlboro and began a systematic check. The fuel lines were clear, he had only installed an "in line" filter last week. He popped the bottom cover off the carburetor and checked the jet. Nope, wasn't that either, no blockage there. He checked his plugs, but they were dry and in good condition. He then made a cursory check of the wires, to see if the lead from the ignition hadn't vibrated off. It wasn't until much later that Apache realized, with horror, that his entire electrical system had self-destructed. The battery, the Bosche alternator, the fuses,

everything. Ka-put.

Apache sat cross-legged on the concrete floor of his garage, staring at the chopper. "What the hell?" he muttered. "What the hell...."

He was still sitting there when the sun came up.

The dog barking woke Jimmy Smithers up. He glanced at his watch. It was seven a.m. Shake never barked like that unless he had good reason. Grumbling to himself, Jimmy slipped into a bathrobe and a pair of boots, took his shotgun out of the closet, broke it to check that it was loaded and went downstairs. He peeked through the kitchen window and saw two shadowy figures groping around inside the Corvette in his driveway. The car alarm had not gone off. Pros.

"Sons of bitches," mumbled Jimmy. "That's one Vette you *ain't* going to get, God damn it!"

He opened the back door slowly, quietly, cradling the shotgun under his elbow. Then, bringing it up into position, he crept along the side of the house. The Vette was in the driveway just around the corner. Jimmy took one step out beyond the corner of the house and felt cold metal against the side of his head. There was a very loud click. At least, it *seemed* very loud. Flattened against the wall, sideways, on the other side of the corner of the house, stood a tall blond man holding a Smith and Wesson Model 27 .357 Magnum. The loud click Jimmy had

heard was its hammer being cocked.

"Cops don't take too kindly to having people sneaking up on them with shotguns, you know," said Warden.

Warden entered the interrogation room, where a badly frightened Jimmy Smithers sat in a straight-backed chair behind the table. He threw the Copstopper down onto the surface of the table.

"What happened to it?" he demanded.

"I have the right to make a phone call," stammered Jimmy.

"You'll get your phone call," said Warden. "You haven't been formally charged, yet." The agent was watching through the mirror on the other side of the room.

"I don't have to answer any questions," said Jimmy.

Warden smiled. He walked over to Jimmy, leaned down and put his arm around the youngster's shoulder. "Jimmy, my friend, you have an illegal device in your possession, you attempted to use a shotgun to hinder police officers in the performance of their duties, and two ounces of marijuana were discovered in your car. I'd cooperate, if I were you."

"That grass was planted and you know it," said Jimmy, defiantly. "I never touched dope in my life and I can produce any amount of people you want to swear to that. Hell, I don't even drink!"

"Save it for the judge, Jimmy." He

pointed to the Copstopper. "That thing self-destructed. The lab boys figure it masered itself when they tried to open it. You want to tell me how that happened?"

Jimmy shrugged. "You got me."

"Are you going to be a problem for me, Jimmy?"

"I'm telling you the truth! I don't know! I don't know how it works, I just bought it, that's all."

"Who'd you buy it from?"

"I want to make my phone call."

"In a minute, Jimmy." Warden smiled again. "I'll tell you what, we'll just forget about the whole thing if you just tell me where you got it. We know about Dr. Road Runner. Just tell us who he is and where we can find him and you'll be free to go. Easy as that."

"I don't know who Dr. Road Runner is," said Jimmy.

"Then where'd you get the Copstopper?"

"I bought it from a friend of mine."

"Who's your friend?"

"I want to make my phone call."

George put down the component he was working on and answered the phone.

"Doc? It's me. They got Jimmy."

"Who? The police?"

"Don't talk, just listen, the phone could be tapped, for all I know. My contact in the department hinted that the CIA might be involved. God knows why, they're looking for you. I'm splitting, get yourself another distributor.

If you're smart, you'll do the same. Bye." The line went dead.

"Bye," said George, into the dead receiver. He replaced it and scratched his graying hair absently. "The CIA?" he frowned. "The CIA?"

"It's a rotten bust," said Warden. "The kid's not stupid. He wants to call his lawyer, and I'm not about to put my ass in a sling by denying him his rights. I'm going to let him go and keep him under surveillance."

"You'll do nothing of the sort," said Wheeler. "We went to a great deal of trouble to set up this arrest for you. You might say we have an investment in that young man."

"Listen, I understand how you feel, but I have to follow procedure. I—"

"No, you don't. We'll take him off your hands. Don't worry about it. There was a possibility that you could frighten him into co-operation, but, clearly, you've failed in that regard. We have other methods of extracting information."

"I don't want to know about it," said Warden. He sighed. "Shit, how did I ever get myself into this?"

"You didn't. We did."

"All right. All right. But you're going to sign a release, accepting custody."

"You're joking."

"No, I'm not. It's either that, or you don't get him."

"Do you realize who you're talking to?"

"Yes. I don't care. I'm not putting my job on the line for anybody. I'm getting it in writing. No Watergate for this boy."

The agent's smile faded. And then he smiled, slowly.

"All right. We'll do it your way. But I wouldn't push my luck, if I were you. Draw up the necessary forms."

With a little help, Jimmy "co-operated."

After that; they started gaining ground. They netted three more Cop-stoppers. This time, they sent them back to Washington, to let the men who were the experts try their hand at disassembly. All three devices self-destructed.

"There's only one way to take the damn things apart," said Wheeler, disgustedly. "You turn the wrong screw, attempt to pry one rivet out of sequence, and the circuit inside reverses itself, masering the device into oblivion."

"So you have to keep trying to get more of them until you hit upon the right combination?" asked Warden. "That could take forever."

"We could get lucky, but we're not counting on it. No, there's another way to go, now. Those three we apprehended gave us more to go on. Gradually, we're getting closer. And we're going to start doing something else we should have started earlier. A directive is being issued to every major police

department in the country. As of now, only self-contained radar units will be used. The moment one of them goes haywire, it will trigger a remote unit calibrated to lock onto the particular frequency that attacked the radar. In effect, tracing the pulse back to its source. That should assist the officer in identifying the offending vehicle. And, as of now, we're implementing ECM technology within the ORBIS system you have set up here."

"How do you mean?" asked Warden.

"We're arranging to have the ORBIS system modified to allow for the inductance attack upon the sensors. The moment the field from the device hits the sensor, causing it to malfunction, a secondary system will be triggered, which will fire a small homing component. This component will be magnetized and will adhere directly to the undercarriage of the offending vehicle, allowing us to track it. It wasn't our original intention to break this organization, we thought it wouldn't be necessary, but we'll do whatever it takes to run this Dr. Road Runner to the ground. One way or another, rest assured, we'll get him."

"It sounds like you're declaring war," said Warden.

"We are."

"How much is all this going to cost?"

"The expense incurred is negligible, considering the potential benefits we can reap."

"You mean sort of like the end justifies the means?" asked Warden.

The agent's smile faded, once again. "Like I told you once before, Warden. Don't push your luck."

In the amount of time it took to implement the plan, the conflict escalated. George quickly realized that the same principle that allowed his Noiseabater to defeat Apache's smoke-belching Harley-Davidson could also be utilized to neutralize police pursuit. After lengthy experimentation, he managed to incorporate both the Noiseabater and the Copstopper into one unit. He tested it out himself on the Pennsylvania Turnpike. The moment his car entered the police radar field, his new invention, now termed by him the Super Copstopper Mark V, neatly fused the radar unit. As he passed the police vehicle at one hundred and fifteen miles per hour, the officer gave pursuit.

George allowed himself to enjoy the excitement of the chase for a short while, and then he reactivated the Super Copstopper. Steering with one hand, he quickly made the necessary manual adjustment. And fired. The highway patrolman had to flag down a passing motorist to give him aid.

By the time the federal counter measures were in force, the distribution of the Super Copstopper Mark V was already under way. As stalled police cars proliferated throughout the nation, the newspapers and the televi-

sion commentators reported on the "Speed War" that was being waged upon the highways. There was an article in *Time* and one in *Newsweek*. Mike Wallace devoted a full segment of *60 Minutes* to the "underground movement" that was "slowly growing," distributing a "Super Fuzzbuster" to the public. In self-defense, Congress repealed the fifty-five mile per hour speed limit, raising the new national limit to seventy-five. It didn't help much.

It was getting completely out of control. George found himself working literally around the clock in an effort to keep up with the demand. It was impossible. Four of his distributors were captured, but they all refused to talk. Two of them were writing books.

George no longer had the time to take his weekend motorcycle rides into the Poconos. He no longer had the time to tinker in his shop or read or watch TV or tend his roses. What had started out as fun was now very much a full-time job. And George had *always* hated full-time jobs. It simply wasn't worth it anymore. He had had a couple of offers. He shrugged his shoulders, took the highest one and threw in the towel. He sold the plans.

In three months, the plans for the Super Copstopper Mark X could be purchased under the counter in every speed shop in the country. Traffic fatalities skyrocketed and the police were helpless. And, gradually, the craziness died down. The novelty of

speeding ceased to be a novelty, and each person began to drive to his own capabilities. Those who could drive fast and do it well, drove fast. Those who didn't choose to do so prudently avoided the rapid transit lanes. The statistics leveled off and *laissez faire* was practiced on the roadways.

The government obtained their copy of the plans the same as everybody else. They paid for them. The experts got together in a huddle, and soon construction of a super ECM system was under way. The Soviet Union began to build one of their own, and China bought theirs from Japan. Very quietly and, surprisingly, without much fanfare, it was soon announced that the threat of nuclear warfare was now nonexistent. Disarmament was simply obsolete.

The phone rang and George put

down the screwdriver and reached for the receiver.

"Hello?"

"George, ole buddy, got a minute?" It was his next-door neighbor, not Apache, but the one he watched the football games with.

"Sure, what's up?"

"Listen, my stereo is on the fritz, again. I was hoping you could check it out for me."

"Sure thing. I'll be right over."

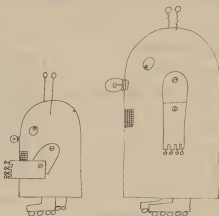
The door opened and a can of beer was placed into his hand.

"I figured you might want a brew."

"You're a gentleman and a scholar," George smiled. "What's with your stereo?"

"It's the goddamn turntable, again. I think the belt's slipped off the track. Can you fix it?" Warden asked.

"I think so," George replied. "Let's have a look."



"Stop biting your nails."

You've got to be putting us on



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F&SF Competition

REPORT ON COMPETITION 29

In the December issue we asked for Burma Shave roadside ads adapted for the traveler of the future. Not a large response (some complained that they were too young to remember such signs) but an interesting one. Jan Nielsen writes: "I grew up out past Red Wing, in rural Minnesota, where the first Burma-Shave signs stood, so it pleasures me to imagine the signs striding out the star lanes of an imagined or real future. Aren't there a few of the original jingles which would be appropriate? For example: IF YOU / DON'T KNOW / WHOSE SIGNS / THESE ARE / YOU CAN'T HAVE / DRIVEN VERY FAR (1942)." In that connection Lawrence Evans offers one genuine B.S. jingle that is most certainly appropriate: FREE! FREE! / A TRIP TO MARS / FOR JUST / ONE THOUSAND / EMPTY JARS! / BURMA SHAVE.

FIRST PRIZE

AN ADDED BONUS	YOU WILL SEE	OUR JARS	STAY CLOSED IN	ZERO GEE!
THERE IS	IN HYPERSPACE	SO IT	NO TIME	TO SHAVE YOUR
NO TIME		TAKES		FACE
IT HELPS	SHAVE	SURE ENOUGH	AND MARTIANS	IT'S TASTY
	EARTHMEN		SAY	STUFF!
HIS FACE	SO BADLY	HE COULDN'T	TO FIND	THE
PLATE GOT	SCRATCHED	SEE		HATCH!

—Lawrence Watt Evans
Lexington, KY.

SECOND PRIZE

TIME TRAVEL	FOR GOOD	JUST DON'T	YOUR OWN	GRANDDAD!
BACK	OR BAD	DO IN		
BELIEVE NO	FICTION	WHOSE HEROES	DEPILATORIES	
SCIENCE	STORIES	USE		
IF SIGNS	ARE OUT OF	YOU'VE JUST	THE	OF LIGHT!
LIKE THESE	SIGHT	GONE PAST	SPEED	

—Frank Bequaert
Lexington, MA

RUNNERS UP

WHEN ORBITING	WITHOUT A RAZOR	TAKE OUR ADVICE	DON'T USE THE LASER
REMEMBER AS	THROUGH SPACE YOU DRIFT	THAT'S NOT SUNBURN	IT'S RED SHIFT.
TRAVEL SAFE	ENJOY YOUR FLIGHT —	PLEASE DON'T EXCEED	THE SPEED OF LIGHT

—Pat Cadigan
Overland Park, KS

FINEST FOOD	AMONG THE STARS	ASIMOV'S!	TURN LEFT	AT MARS!
SMOOTHEST CHEEKS	THROUGH SPACE AND TIME	USE OUR REGULAR	OR LEMON-LIME!	
IN LUNAR CITY	THE DINE & QUAFF	EASY DOCKING	EASY OFF!	

—Mark Couch
Birmingham, AL

FOUR-THREE- TWO-ONE —	AND THEN IGNITION	WE'RE SPACE BOUND ON	FACE-SHAVING MISSION
TWO THINGS A GIRL	IN SPACE AVOIDS	HIS BEARD STUBBLE	AND ASTEROIDS

—Victor Sotak
Three Rivers, MI

COMPETITION 30 (suggested by Donald Garden)

Harlan Ellison has recently released recordings of his short stories. By interposing famous or notable titles of sf stories or books with those from popular songs of any period, send in your suggestions as to how sf writers might make their bid for the top ten.

Harlan Ellison's "*There Is A Beast That Shouted Love In Spanish Harlem.*"

Jack Vance's "*I Only Have Eyes of the Overworld.*"

Rules: Send entries to Competition Editor, F&SF, Box 56, Cornwall, Conn. 06753. Entries must be received by April 15. Judges are the editors of F&SF; their decision is final. All entries become the property of F&SF; none can be returned.

Prizes: First prize, eight different hard cover science fiction books. Second prize, 20 different sf paperbacks, Runners-up will receive one-year subscriptions to F&SF. Results of Competition 30 will appear in the August Issue.

Fantasy & Science Fiction

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